



Chinese Mechanical Water Clock

THE MEANS
OF
AMELIORATING INDIA,

DEDUCED FROM
PERSONAL OBSERVATIONS.

, MORE ESPECIALLY
**THE USEFUL EMPLOYMENT OF BRITISH SUBJECTS AND
CAPITAL IN THAT COUNTRY.**

BY
ARCHIBALD GRAHAM, SURGEON,
HONOURABLE EAST INDIA COMPANY'S BOMBAY ESTABLISHMENT.

WITH A PREFACE BY H. STOWELL,
RECTOR OF BALLAUGH, ISLE OF MAN.

MDCCCXXXV.
GLASGOW:—JOHN REID & CO.
EDINBURGH:—OLIVER & BOYD.
DUBLIN:—JOHN ROBERTSON & CO.
LONDON:—WHITTAKER & COMPANY.

PREFACE

BY THE REV. H. STOWELL,

AUTHOR OF "THE LIFE OF BISHOP WILSON."

AT the present eventful period, when every day records the advancement of arts and the progress of civilization, the eye of the philanthropist is directed with peculiar interest to the shores of India. Though separated from Great Britain by an immense ocean, the two countries are connected by the closest ties. An all-wise Providence has appointed this connection for the accomplishment of the most important ends. It is designed not merely to promote the interests of commerce, but to enrich the Hindoos with "the pearl of great price," and to introduce the Lamp of Truth into the benighted regions of China. An awful responsibility attaches to the commanding station which

England occupies. Myriads of the human race are placed under her control. She is planted in the bosom of the ocean as the Pharos of the world. This distinguishing pre-eminence is granted her, not for her own sake merely, not to enlarge her territory and increase her revenues, but to extend the blessings of Christianity from pole to pole. This highly-favoured nation has capabilities which no other nation under the sun possesses. Their very name carries weight and authority in far-distant lands. The rudest savages learn to venerate the people who, with disinterested zeal, send amongst them "good Missionary-man and his Book." But, though Britain has made such rapid advances in the march of benevolence, still an immense territory lies before her unblest with her influence. However her subjects in India may have been protected by her arms and benefited by her laws, little has hitherto been done for the permanent amelioration of their condition, for the increase of their domestic comfort, and the im-

provement of their national character. How these grand ends are to be accomplished, is an inquiry of vital importance. Correct information on this subject claims the attention of all who feel an interest in the real prosperity of India. Such information the following Treatise is designed to convey. It communicates the fruits of personal observation, during a series of years spent in India, in the Honourable Company's service. It comes from the pen of an individual of unquestionable veracity and genuine benevolence, whose statements may be relied on with entire confidence. They are not the crude theories of a mercenary speculator, formed without any sufficient data; nor the impracticable plans of a visionary adventurer, but the results of judicious experiment and accurate investigation. The design of the writer is to show how the welfare of India may most effectually be promoted. His residence in that interesting country has powerfully drawn forth his sympathies towards the native population, with

whom he appears to have cultivated much kindly intercourse. His profession brought him into close contact with all the various castes of the Hindoos, and gave him an opportunity of becoming intimately acquainted with their personal, domestic, and national habits. The piercing look of the wounded or dying Indian often touchingly demanded, not only, "Can'st thou not relieve my bodily pain?" but, "Can'st thou not minister to a mind diseased?" and the demand was readily met with a kind and healing response.

The testimony of one so well qualified to form a correct judgment, with regard to the best means of benefiting India, justly claims attention. That testimony pronounces Christianity to be decidedly the grand instrument for softening the ferocious Arab, for elevating the degraded Hindoo, and enlightening the superstitious Chinese. Let the friends of India, in entire reliance on the Divine blessing, employ this instrument of transcendent excellence resolutely and perseveringly, and thus

advance the happiness of nations and individuals,
and hasten the period when the converted tribes
of the heathen world—

“ Shall all (redeemed from error’s night,)
Appear as numberless and bright
As crystal drops of morning dew.”

BALLAUGH RECTORY, ISLE OF MAN.

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CHAPTER I.

Few things, perhaps, in this changeable world, are more remarkable, than that a small Island, in the corner of Europe, should open the way by its commercial enterprize, for the civilization of the greatest portion of the human race, give laws to far distant countries, and bear rule over one of the most extensive empires of Asia. Under the influence of national pride, we may have been ready to ascribe these extraordinary acquisitions to our own skill and ability. But without detracting from the praise due to our country, it is necessary to observe, that no prowess or military science could have effected so mighty an achievement as the conquest of India, had there not been, under Divine Providence, a concurrence of the most remarkably favourable circumstances. Any one intimately acquainted with the history of our proceedings in the East, will readily acknowledge, that the progress of our arms was accompanied with the most

astonishing instances of providential interposition, and hastened forward in a manner altogether unexampled. Jealousies existed betwixt different princes and states, animosities suddenly arose among them, treaties of friendship and alliance were broken by the most trifling and unfounded apprehensions; by the unwarrantable demands of the one party, or by the obstinacy and pride of the other. Even in the minuter subdivisions of society, there was a total destitution of affection and sympathy. Ambition, and a cold suspicious hatred, not only kept the different princes of a family from uniting against the common enemy, but also incited them, for a momentary advantage, to seek the aid and favour of the rising power of foreigners, whose very manners and habits were odious to them. “There is a tide in the affairs of man,” and, we may add, of nations also. Human sagacity cannot always discern its flowings, nor human power restrain its ebb. Man can only avail himself of what is brought to his hand, and that India was brought to the hand of Great Britain, may be proved by uncontradicted and undeniable facts. Indeed, the most superficial glance at the history of British India, cannot fail to evince, that British prowess was not only seconded, but led on and kept alive by unexpected and most opportune interpositions of an over-

ruling Providence. It is allowed, that the first firm footing which the obscure English traders obtained on the banks of the Ganges, was gained by the professional skill of an English medical gentleman, of the name of Broughton, resident at Surat. " This respectable individual having visited Agra in 1651, was fortunate enough to remove a dangerous illness which had affected the daughter of the Emperor Shah Juhan. The gratitude felt by the monarch was employed by Broughton, with a laudable patriotism, in obtaining for his countrymen very ample commercial privileges. From Agra he proceeded to the court of the Nabob of Bengal, where his skill, exerted with equal success, was rewarded by a grant to the English of very extensive local advantages and immunities."*

It must be granted, also, that in the most disastrous state of their affairs, when the Mogul sovereigns, and Aurungezebe, king of these kings, roused into enmity, ordered them to quit the country instantly and for ever, these merchantmen contrived to retain the footing they had acquired, not more by the most abject submissions, than by the cupidity and jealousy of the several princes, each of whom coveted the profit of the English commerce, and grudged his neighbour

* Historical and Descriptive Account of India, p. 376.

a share in its advantages. It is well known that the privileges granted by the royal court in 1715, which were long considered as our charter in India, were acquired providentially and most unexpectedly through the medical skill, generosity, and public spirit of Mr. Hamilton, the surgeon to the embassy to that court. This gentleman had succeeded in the cure of the Emperor, when his own native physicians were unable to subdue the illness, and was gratefully requested by his royal patient to point out a reward suitable to his services. Instead of soliciting a boon, by which his own private fortune might have been advanced, he, with true nobleness of spirit, asked and obtained certain distinguished immunities for the privilege-seeking foreigners.

In tracing the history of the British in the East, we observe, that while their prosperity drew over to them first one and then another of the princes, and obtained for them grants which could never afterwards be recalled; the crisis, too, of their adversity, was many a time singularly averted by the sudden death of a principal foe, or the treacherous revolt of his most confidential ally. From this cause, battles were often won by a handful of English troops. The battle of Plassey, which virtually transferred to Britain the sceptre of India, was fought with 3,100,

of whom only 900 were Europeans: with this force Clive undertook the subversion of a mighty kingdom. Against him was an army of 50,000 foot, 18,000 horse, and a long train of artillery. When he saw this force, he paused, and called "a council of war, in which all concurred to delay the attack, excepting Major Coote, who raised objections, stating that the men were now full of courage and confidence, and would feel their spirits entirely damped by delay—that the enemy would soon obtain fresh reinforcements, more particularly a large detachment of French troops in the interior; in short, that there was no other alternative, but either to attack now, or, renouncing all their ambitious projects, march back and shut up themselves within the walls of Calcutta. Clive, after dismissing the council, took a walk in an adjoining grove, and after an hour's meditation, became convinced that Coote had formed the soundest view of the subject. He therefore determined immediately to cross the river, and commence an attack on the Indian army. The contest proceeded languidly. The Nabob's general, Meer Jaffer, deserted him, and came over to the English in the midst of the engagement with his corps. Clive then determined to make an immediate and brisk attack upon the enemy's camp. His troops in advancing to the lines, were surprised to find that

not a single shot was fired. They entered, and still no resistance; there was no army; not a single vestige of that numerous host which before had been deemed irresistible. They met with no obstruction, unless the tents, luggage, and artillery, with which the space was incumbered. The Nabob had been seized with a panic, and when he learned the defection of 'Jaffer, gave up all for lost, mounted his fleetest elephant and fled, escorted by 2000 of his chosen cavalry."* We now find that those princes who at first countenanced the advances of the stranger, found it necessary to fight with such as opposed him; and the native powers having weakened and exhausted their strength, gradually became tributary to the European. Rivers increase as they flow onward, and tributary streams are lost in the current which they themselves augment. British merchants, with balances in their hands, presented themselves upon the shores of India, when suddenly, and as if by magic, the balance rod was changed into a sword, and the sword into a sceptre. Kings who had condescended to traffic for the commodities of the little distant island, found themselves compelled to purchase them, or run the risk of war. They were astonished to perceive a

* Historical and Descriptive Account of India.

sceptre extended over their heads by these cunning merchantmen, and a covetous neighbour offering to purchase their thrones at their hands. No sooner had the foreign traders commenced their traffic in thrones and sceptres, than they met with a formidable check, in the valour and sagacity of Hydur Ali. With astonishing perseverance and skill this native hero succeeded for a time in stemming the torrent of his country's adversity, and even prevailed so far as to turn the tide against its foes, but the sudden and powerful hand of death arrested him in his career of glory, and the waters of hope, flowing more impetuously by the obstacles which they had encountered, bore the strangers onward with rapidity and exultation.* Now all seemed secure, and the smiling face of prosperity appeared as though it could never wear a frown again. A war, however, soon opened—the last and the greatest. The Mahratta princes formed a deep and extensive plot to overturn our usurping

* "A curious circumstance," says the Author of 'Twelve Years Military Adventure,' "happened during the siege of Seringapatam, which was told me by a friend who was present at the siege. Had the attack been deferred twenty-four hours, we should have been compelled to raise the siege, for on the very night succeeding the storm, the river came down so suddenly, as to be rendered impassable. Already had provisions become very scarce in the British camp, and this, with the approaching Monsoon, would have rendered the situation of our army very critical, surrounded as it was by allies whose good faith could only be secured by success."

and all-grasping power, but in six or seven months they were themselves dethroned. It seems almost incredible, that with an army of of 116,000 men, of which only 13,000 were Europeans, the British should have been able, not only to keep the field, but to gain such decisive victories over hosts of foes, which amounted in all to 217,000 men. The handful of islanders were gradually to become rulers, by circumstances which they could not control, and in opposition to the most positive injunctions of the home government. They were protected amidst all dangers and difficulties, and obtained conquest after conquest over the immense population of the East.

We now behold their sway universally established from the wide spreading Hindoostan, to the lofty Himmaleh, and even to the borders of China, in a country sustaining upwards of one hundred millions of inhabitants.

In the conquest of India, the British troops were aided as much by the dread and fear of Europeans, which seemed to be implanted by Divine Providence in every Hindoo, as by our military skill, science, and bravery. "I am not alarmed at what I see of the forces and resources of the Company, *but at what is unseen*," said Hydur Ali, with emphasis.

The unseen and supposed extent of power at home,

threw a mystery and alarm around the English—their sudden appearance among them—their manner, language, and dress, were all cause of wonderment. The Brahmins or Priests represent us as having sprung out of the sea, and living in that element, while the common ploughman designates us “the wild people, who suddenly came out from the deserts, and the terror of his children.” Of this the following circumstance is a proof:—The liberal Elphinstone, while at the head of the Bombay government, appointed medical officers to introduce the blessings of vaccination among the natives. No sooner, however, did the vaccinator reach the sphere of his operations, in some parts of the country, than the females fled in all directions with their children; and though the small-pox had committed severe and frequent ravages among them, no arguments could prevail upon the husbands to cause the children to be produced, and no assurances could allay their fears. They conceived that we intended to put a mark on the arms of their little ones, and afterwards carry them away for soldiers or slaves.

Reflecting on the manner in which India has been delivered into our power—on the apparently inadequate means employed for the conquest of that vast country—on the undeniable superintendence of Divine

Providence in directing and aiding the arms of Great Britain, in not only leading, but, as it were, forcing our armies into collision with the native powers, till these were successively overthrown and subdued; we cannot but be convinced, that he who ruleth the nations, has some great purpose of wisdom and mercy to be accomplished by our instrumentality towards those whom he has thus mysteriously placed under our influence. And when Providence furnishes us with means, and opens up the way for the employment of them, we cannot divest ourselves of the responsibility and obligations which are thus imposed. But besides this consideration, few persons will deny, that England owes a deep debt of gratitude for all the wealth she has drawn from India. Immense fortunes have been accumulated there, and afterwards spent in England. Many of the English families owe all their affluence to the East. Many of them have found in it a sphere of lucrative and honourable employment for their younger branches. Sons have sent remittances thence to support their parents or other friends in ease and comfort. Merchants have found there a ready and extensive market for their goods. India has poured a stream of wealth into Great Britain which loudly calls for gratitude. Surely it becomes a great nation to arouse from her apathy,

for the many millions of her Eastern subjects, to call to mind her sacred obligations, and to reflect for what purpose such a noble possession has been placed in her hands. Certainly it could never be for the wealth we have received, nor for the mere honour which is attached to such a mighty conquest, but for the noble purpose of raising her from darkness and the most horrid superstitions, that she might become assimilated, in some degree, to ourselves, in religion, liberty, and civilization.

We need hardly ask whether we have acquitted ourselves of these obligations, or whether we have made a suitable return to India for the immense sums of which we have deprived her. The almost universal feeling in England, is disappointment, with regard to the improvement which has hitherto been effected in the condition of our Eastern possessions.

But, although it cannot be denied, that this feeling has too just a foundation, we are not hastily to conclude, that no good has been effected. It is only necessary to compare the present state of the countries under our sway, with their condition under the government of their native princes, to be convinced, that at least a way has been opened for the employment of those means, which, once to have proposed, would

have been the signal for the expulsion of Britons from the shores of Hindoostan.

The small sprinkling of Englishmen, and the establishment of an English government in the Deccan, have already had the effect, in a slight degree, of enlightening the ignorant, and subduing superstition. The low caste boys now find themselves placed at our schools, more on an equal footing with those of the higher grades, and their intellect, naturally acute, is both fostered and improved.

The spiritual power of the Priesthood has been somewhat lessened, and their exemption from punishment, even for capital crimes, is not now so extensively tolerated. The magic thralldom under which they hold the unfortunate creatures, sprung, as they assert, "from the Creator's feet," has been diminished; and, on the other hand, the blind veneration with which the degraded orders behold those who claim an origin "from the Creator's head," has been somewhat abated. The force of caste has become much weakened. The Brahmins, since we obtained possession of their country, complain that the insolence of the lower orders is unsufferably great. To this class we ourselves are said to belong, because we eat the flesh of the sacred cow. A fellow of a low caste will now presume, they say, to draw water from the same place

with them, and to approach so close to the holy Brahmin, as even to touch the carpet on which he sits, obliging him to purify, wash, and change his clothes. For this insolence he would, in former times, have been severely punished. Under the native governments, the country was a prey to frequent intestine commotions. Wars were often breaking out from the conflicting interests of different kings, and from contentions among the various chieftains or heads of tribes. The land, in some unsettled provinces, where predatory tribes existed, was cultivated only in small circles round the villages, that, as soon as the alarm was given of an approaching foe, the cultivators might take refuge within their town walls, and conceal their property in the secret chambers of their houses. The attacks were often severe and desperate. If the plunderers succeeded, the whole village was sacked without remorse. When the work of devastation was finished, the enemy disappeared. None could tell whence they came, or whither they went. Under a corrupt, immoral, and weak government, these ravages became extensive and distressing. Such was often the state of some of the provinces of India under the native governments—the most unfavourable that can be conceived to the improvement of a country, and the advancement of the arts and

sciences. After such frequent scenes of awful desolation, the immediate effects of our extraordinary conquest of India, were truly astonishing. As if by magic spell, rapine and plunder ceased throughout the land. In the Mahratta country particularly, the change from the intolerant, unjust, and oppressive Brahmin government, was hailed with delight. The British name acted like a charm over the many subjects placed under her dominion,—all classes of the natives sought protection under her wings. The predatory tribes betook themselves to agriculture for a subsistence. Anarchy and confusion ceased. The blessings of peace followed, and British justice was extolled throughout the empire. Truth, however, demands the confession, that these as yet have been the only benefits which have accrued to India, from her subjection to Britain; benefits, too, which, great as they are, arose rather from the peculiar circumstances in which England was placed, than from any great effort or sacrifice, which, as a nation, she has made. It would naturally be supposed, that after this state of confusion had ceased, and peace been enjoyed so long under the British government, the country must have flourished abundantly. This, however, is far from being the case. The change for the first few years was pleasant, but every succeeding year

only tended to show, that the nature of the English government was sadly defective, and altogether incapable of developing the internal resources of this extensive empire. The proper knowledge and skilful employment of such resources, are essentially necessary to give permanency to peace, to restore the ruined condition of the subjects, and to raise them to wealth and prosperity.

CHAPTER II.

BEFORE entering upon the mode of employing Englishmen extensively in the East, as the grand means of ameliorating the condition of the natives, it will be proper to point out some false notions that still exist in England regarding that country, and to prepare any person desirous of engaging in any enterprize likely to be profitable to himself, and beneficial to the Hindoos, for much that will appear strange on his arrival in India. Opinions respecting India of the most extravagant and unfounded nature are still held in England. It is represented as abounding throughout its whole extent in wealth and luxury. The young, impressed with this false idea, are induced to hasten to it, as to a country where they may have riches for the gathering, and a full enjoyment of their existence amid the voluptuous entertainments of the orientals.

This erroneous idea of the state of India, may be formed by him who merely visits one or all of the three great cities—Calcutta, Madras or Bombay, or perhaps some of the other chief places where the English are stationed. In the former, he will find the principal officers of the government, and the wealthy English and native merchants residing. He will see all the pomp and luxury that riches can command, and be dazzled with the different costumes and manners of the Eastern nations. In Bombay, he will behold the Englishman rolling softly along in his carriage, dressed in white jacket and round hat; the active Parsee, or fire worshipper, following in his large coach, accompanied by his friends, all of them having large upright turbans, smooth faces, and dark mustachoes, and dressed in loose white robes, with a handsome girdle round the loins. Numbers of the same caste may be seen in the evening, ranged along the beautifully placid sea shore, muttering their orisons to that glorious luminary, the setting sun, then burnishing with his last golden rays the western sky. The fort of Bombay has a beautiful appearance. It is strong and extensive, with a handsome glacis, called the esplanade, sloping down from it. Passing along this, the attention of a stranger will also be attracted by palanquins, hurrying along with gentlemen,

luxuriously reclining, borne along on the shoulders of the Kamathe Hamál, or bearer, with brawny limbs, and only a cloth round his loins, a plain turban, sandals on his feet, large silver bracelets ornamenting his arms, and golden rings his ears. Near the wells, the upright Hindoo, or fair Parsee woman, may be seen gracefully balancing on her head, several pitchers, one above the other, full of water. The silver rings on her toes make a jingling noise as she moves along. Massy silver rings decorate her legs, numerous bracelets her arms, and golden ones her ears and nose. The stern Arab may also be seen stalking sedately amongst the crowd, with his long flowing black beard, and a rosary in his hand. On the roads are to be descried Armenians, Jews, Portuguese, Chinese, Rajpoots, Moguls, and the different classes of Mussulmen and Hindoos in their various costumes. The young cadet also, lately arrived from England, and now left to act for himself in this new world, and ready to follow the habits of those around him, is seen riding rapidly along, on his way to the mess, proud of his red jacket and brilliant cap, and the prancing Arab steed which he has just purchased. On the several roads leading through the densely peopled neighbouring villages, are to be seen numerous native carriages, some with a pair of bullocks, trotting

along, with bells hanging from their necks, others with curtains drawn closely round to conceal the inmates, some with a single horse, driving rapidly, with three or four Hindoo clerks, returning to their homes from office, sitting on cushions back to back, conversing, perhaps, about the different documents they have been transcribing, and bearing on their foreheads the distinguishing mark of their sect. On the right, one of the finest bays or harbours in the world comes into view, from which the Ghauts appear in soft and majestic grandeur at a distance, while nearer lie the islands of Calaba, Bombay, and Salsette, studded with many villages, and beautiful bungalows peeping from between the numerous lofty cocoa nut trees, and different species of the elegant palm, forming altogether one of the most magnificent and lovely oriental scenes the eye can rest upon. The sight of so many English ships gently pressing the bosom of the deep, brings to recollection the immense oceans that they have had to traverse, and the humble manner in which that nation sought for a share in the traffic of the East, while the Fort, with its bold front, marks the character it has now assumed.

A stranger passing from Bombay to any of the principal stations where the English reside, will be amused at the Eastern mode of travelling, and at the

appearance of the different persons he may meet on the road. Before the traveller has advanced far, he may espy a line of camels carrying tents, or loaded with merchandise, whilst on the back of the foremost the driver is perched at a considerable height, seated on the baggage. The long bending necks, awkward legs, and peculiar gait of the camels, will attract his attention, and their curious mode of kneeling down to allow the baggage to be removed or buckled on, will call forth his admiration. His eye may next rest on the diminutive ponies of the country, as they pass and repass, variously loaded, accompanied with native drivers, almost as devoid of clothes as the animals they conduct. His ear will now be saluted with the continual tinkling of bells, depending from the necks of bullocks, plodding their weary way under bags of grain and other country produce. Conspicuous amongst the drove, are seen some painted horns, elongated by ornamented sticks attached to them: these mark the favourite bullocks. A band of those native Sepoys, who assisted us in conquering their country, may be overtaken on the road, who appear joyous at having obtained leave of absence for six months, to go, it may be, as far as the distant presidency of Bengal, that they may again behold the friends they had left in their youth. Some of them, perhaps, are returning

to solace their aged parents with their company, and contribute to their comfort, by throwing into their laps the savings from their monthly pay. Others of them, it may be, with less noble purposes, are seeking the quiet of home, and a temporary freedom from the drudgery of drill, or the fatigues of war. Most of them, he will observe, are mounted on the ponies peculiar to the country, each of them uniting the valour of the hero with the qualifications of the cook. Here a sword or other martial implement, proclaims the warrior, whilst dangling on the other side, brass cups and plates, with clattering noise, betray the cook. Carefully strapped, may be discerned the iron plate upon which, in the heat of the day, they cook their cakes under the shade of some sheltering tree. Nor will the European observer fail to remark how proudly every one displays his red jacket, conscious that it confers on him a character and influence which will easily enable him to take advantage of the humble villagers as he travels along. Conveyances of different kinds may occasionally be met with. Carts with pairs of bullocks containing supplies for the troops. Mahomedan servants proceeding on ponies in advance of their master, to prepare the way, and have every thing ready for him at the next halting ground. Natives may be observed hastening

along, each with a pole over his shoulder, at either end of which dangles a chair, table, or other piece of European furniture. They wonder at our luxurious habits, which seem to them exceedingly superfluous, as mother earth supplies them gratis with table, chair, and bed. Cantering along, the Sahib himself comes up, dressed in white, and mounted on a handsome Arab horse. Palanquins, containing his lady and her family, next reach the halting ground, which are put down, perhaps, at the door of a tent, when the weary bearers gladly mutter thanks to some protecting power, and run to drink water at the refreshing well, or tank, lifting it up to their mouths in the hollow of their hands. Inspiring dread, admiration, and wonder, the pompous Elephant, bearing on his back the magnificent Houdah, may perchance be met, marking the wealth and luxury of its possessor.

After witnessing all this blaze and parade, at one of the chief seats of government, the riches and luxuries of the East will be painted in glowing colours by the casual visitor, who will perhaps imagine, that all other places are equally rich and gay. But let any one leave the scenes of European pomp and consequence, forego for a little the refined society of the opulent, and let him mix with the miserable, depraved, and impoverished natives of the Deccan, or

almost of any part of India, and he will soon perceive how erroneous and extravagant are all such opinions of the present wealth of our Eastern possessions. Each of the miserable villages which he sees around him, must contribute a fixed yearly land tax for the support of the government; and the secret toil which gave that life, display, and grandeur to the rich city the stranger first beheld, and wealth, power, and consequence to its luxurious inhabitants, must almost all be derived from the humble cultivator of the soil. Should the white face of the European stranger be seen within the walls of a village, the wild dogs of the place will keep up an incessant barking, the cows and very cattle seem afraid of him, the females conceal their faces as he passes, and the children run in to their parents quite terrified. Should he pass by the abode of a Brahmin, or one of the more wealthy class, he will generally see it built of mud, and destitute of windows, with a flat roof. The form of the building is generally square, with an open court yard in the centre, to secure the cattle. Towards this court yard, the house is open, the roof on that side being supported, not by a solid wall, but by wooden posts placed at certain distances. From the street or lane of the village, nothing can be known of what is going on within the precincts of the little court

yard and house, and nothing can be seen but a high mud wall, and strong door, admitting the ingress and egress of the people and cattle. Should the stranger look within this door, the whole family will be thrown into the greatest commotion; the females will conceal themselves in the farther chambers; the head of the family approaches, remains silent, yet seems determined that the stranger shall not advance to defile his cooking place, round which are several bright brass pots. Nothing is to be seen which, in the English sense of the word, may be called furniture. If the stranger enter the hut of the common cultivator, he will find the alarm of the natives much less; the door is so low that he can scarcely enter, and when he has reached the interior, it is full of smoke—such a thing as a chimney has not yet been thought of. Near the cooking spot, are piles of common earthen pots, containing salt, onions, and red pepper, and old bags or dirty cloths, with spices. In one corner, stands the large round basket containing the family grain, and on the floor are the two stones for grinding the daily allowance of meal, near which naked children are crawling up and down. It is impossible to stand upright, without danger to the head, against the cross sticks which support the flat roof. Opening from this room, is another—the family sleeping apartment—

here all is pitch dark, and the beds are lying on the ground. The stranger will now be glad to reach the pure air outside, where he may observe the rude Hindoo implements of husbandry, not in use, lying at the door, and see the cultivators' lean, worn out bullocks, which have been toiling all day, eating their scanty allowance of provender for the night. It will be long before a stranger can learn the real feelings of such people. Fear still rules over them. But through much kindness, and long continued intercourse, they will, at length, express their sentiments of the government, and will say that "we have indeed still peace and security under the British, but are fast becoming a country of beggars."

"With few or no opportunities," says Dr. Marshall, in speaking of the people in the southern Maratha territory, "of comparing their situation with any thing superior to it, the people have nothing but themselves to copy, and have not even the stimulus of emulation to endeavour at improvement; the general tendency of their character is thus rather to sink into the savage state, than to rise in civilization."

No benevolent mind can contemplate such a degree of discomfort and wretchedness in the condition of a people under the British government, without a strong desire to remove the causes from whence these evils

have arisen, and to introduce among our fellow-subjects as many of the blessings of civilization as are in our power to bestow. In what way this most desirable object may be attained, we proceed to show in the following chapter.

CHAPTER III.

THE great means to be used for ameliorating the condition of India, are, in our opinion, the employment of the natives in agriculture and manufactures, under the superintendence of Europeans; the example of the latter in morality, industry, and the use of machinery, the establishment of schools for the moral and religious education of the children; and the preaching of the gospel by missionaries throughout the whole or in any distinct portion of our Eastern Empire. It is of little importance to express an opinion on the comparative value of these means, or to say whether they are to be estimated according to the order in which they are placed, or whether, if restricted to the use of one or two, the last would not be ranked first, and the first last.

Those few Englishmen who have hitherto been per-

mitted to go out to India, have, for the most part, been young men about eighteen years of age, who have perhaps received merely the rudiments of their education on leaving England, and that education seldom or never embracing either a knowledge of the principles of science, or a practical acquaintance with any of the useful arts. They are intended to direct the talents of a rude people only in a military capacity, a people with whom they have no common interest, either in the soil nor any of their pursuits. They are all prevented by their rank, occupations, and habits, from knowing the real state of the natives, and being obliged to move about the country wherever they are ordered, are thus necessarily disqualified by the circumstances in which they are placed, from unfolding the resources and capabilities of our Eastern Empire. But were a class of men who have been differently educated, to settle in India with different objects of pursuit, than those to which the attention of the military servants of the company has been directed, we might reasonably hope that other results would flow from their presence and influence, than we have hitherto witnessed. It is only now, when the unrestrained employment in the East, of men matured in British skill and enterprize is permitted, that we may expect the resources of the country to be gradually developed, the arts to flourish,

the people to be enriched and improved, and the various products of India made extensively available to Great Britain.

As it cannot, however, be expected that men who possess the requisite funds and character, should engage in such an enterprize as that we have suggested without some prospect of remuneration, we will attempt to show, that there is in India an immense unoccupied field for the employment of British capital and skill, in rearing the various products for which there already exists or may easily be created a great demand.

There is not a colonial produce which, by fit encouragement, we might not obtain with advantage from British India. Its vast extent and variety of soil and climate, might render us independent of the whole world. Even tea, for which England gives her millions to China, might be supplied from India. Admit the products of India, exempt from the present prohibitive duties; convince the natives of our desire to ameliorate their condition, by improving their interests and identifying them with our own by mutual advantage; enlighten their minds by this intercourse, and thus we strike at the root of their prejudices, and prepare the ground for the reception of the gospel.

Among the various products likely to answer our

expectation, silk deserves to be classed in the first rank. A reference to the history of our country in former periods, strikingly marks the change which has taken place in this department of commerce. King Henry the VIII. is said to have been able to display a pair of silks on grand occasions, and Howell, in his History of the World, states that Queen Elizabeth discarded her cloth hose on being presented with a pair of knit black silk stockings. A person who has been absent from his country even for the period of twelve years, is surprised on his return to mark the increased use of silk, which has taken place within that period, he sees not only the higher but the lower classes of the fair sex, walking abroad in gaudy silken robes. The enormous quantity of more than four millions of pounds weight of raw silk is now annually imported into Britian for the use of her manufactures. From this great consumption, one would naturally have supposed that all must have seen the obvious necessity of encouraging the culture of raw silk for our own use, instead of depending for that article upon Italy, France, Syria, and China, yet on the Western side of India it has never been tried till lately. The high table lands of the Deccan, situated beyond that extensive barrier of hills, called the Western Ghauts, seem to hold out superior advantages to the flat, low plains of Bengal,

or almost of any other country for the cultivation of the white mulberry, and the rearing of silk-worms. In Italy they dare not venture to strip the leaves from the trees more than once for the worms, which are slow in their progress in that climate, so that they can only have one crop of silk in the year. In the Deccan the mulberry trees thrive with the most surprising luxuriance, and being in perpetual vegetation may be deprived of their leaves six times in the year, and this without any injury to them, provided a few leaves are allowed to remain at the tops of the branches. The progress of vegetation is so rapid in that country, that fresh ones soon burst forth to supply the place of those which have been removed. The worm also is so rapid in its operations, that six crops of silk in the year can with ease be obtained. In the Deccan, manual labour, in consequence of the habits of the natives, is so cheap that a Hindoo woman may be employed for about fourpence daily, and a man for fivepence or sixpence, while in Italy, and every other European country, wages are considerably higher. In Italy they are obliged to have recourse to stoves, and warm currents of air, to heat the rooms in order to hatch the egg and rear the worm in its natural temperature. From sudden changes of atmosphere also, the insect in Italy is liable to disease. In the Deccan

we labour under none of these disadvantages. The silk worm being there in its natural climate, requires no artificial aid. In all its varieties from the copious transpiration of the watery part of the leaf through the pores of its body, it requires a dry, warm, and equable atmosphere to carry off the insensible perspiration, and particularly when such vast numbers of the worms are feeding together in the same room. The climate of the Deccan from its great elevation, from the mildness of the rains, from its temperature, dryness, and equability, is the most congenial to the silk worm of any in the world—yet, notwithstanding these decided advantages for the cultivation of silk in the Deccan, it has been hitherto neglected, while in Italy, with all its natural disadvantages, silk has long been cultivated and is become the grand source of the national wealth. The cultivation of it gives employment to multitudes of the inhabitants of Italy, as well as to many in the South of France. They supply England with the fine raw material for her manufacture of ribbons, silks, and velvets, damasks, brocades, satins, crapes, bombazeens, poplins, shawls, &c. &c. and yet her own India could furnish her with the same material more abundantly and cheaply, if she would but stretch out a helping hand and encourage

men of skill, capital, and enterprize to proceed there, and engage in this promising department.

Instead of raising raw silk in the Deccan, a considerable quantity is annually imported from China. This is throwsted by the most rude machinery for their own domestic consumption. The weavers work it up into silken cloths, or mixtures of silk and cotton, which the Hindoo ladies wear on gala days and grand public occasions. The delicacy of the fingers of the Hindoo are particularly fitted for handling, reeling, and winding silk; and were they to meet with due encouragement, they could produce not only as much as they might require for their own use, but also be able, in time, to supply the market of Great Britain. From such an arrangement, both countries would derive mutual benefit; whilst valuable remittances would be sent to England, an increased circulation of money would take place among our native subjects in India.

When we recollect, that nearly the whole of the vast Chinese empire is clothed in this durable and elegant material, and that the European nations are fast adopting the same dress, the importance of meeting from our own territories, the increasing consumption of raw silk will appear evident. When we also consider how much of the wealth of India we have

received, and how little has returned to it,—when we reflect on the vast number of miserable and degraded fellow-creatures in that country, who have equal claims, with the natives of Africa, to the sympathy of England,—when we consider that multitudes of them are unable to procure work, though they are willing to labour almost for nothing,—the encouragement of the plan here recommended, will appear to be an object of no ordinary magnitude. It would afford employment to thousands in rearing of trees, picking of leaves, attending to the feeding and cleaning of the worms, in sorting cocoons, in reeling, winding, and throwsting, and in dyeing and weaving the silk varieties. Such a prospect may well arrest the attention of so generous and benevolent a nation as Britain, and awaken her to a due consideration of the real value of her extensive empire in the East, and constrain her to find employment to her subjects in the Deccan, by encouraging the extensive culture of silk.

In India caterpillars are to be seen in their wild state, on the trees, about four inches in length, and three in circumference, which, when arrived at maturity, work out from their bowels, a thick glutinous fluid, which they fasten or hook round a twig of a tree; this tenacious matter soon dries, and becomes

hard like a tendon, or kind of rope, and is extended about two inches from the twig. This rope, or thick cord, is a wonderful production to issue from the bowels of such an animal; it resembles the small sinews of the human body when dried, and is so strong, that the twig has generally to be broken before it can be removed. The caterpillar, then, by the same glutinous fluid, fixes to the end of the consolidated cord, two or three leaves into a neat, oval, hollow case, plastering it over nicely with glue, and a whitish coloured fluid, which, when dry, is exceedingly firm, and looks something like a hen's egg, suspended from the twig. In the interior of this small house, it commences its secret work, of spinning from its bowels a silken covering, or winding-sheet, with which it completely surrounds its body. When this is properly finished, it throws off its ugly caterpillar skin, and is transformed into a new creature, altogether different from what it was, and is now in the state of chrysalis. The animal now remains dormant and well protected for many months. It is destitute of feet, and has circular rings round its body. At last, it bursts forth in the night, at the very season when Providence has furnished the trees with the greatest plenty of delicate food for the next brood of young caterpillars. It is now elevated into a new, but far

more distinguished creature—a magnificent and lovely butterfly, measuring four or five inches across the wings. These are of the most delicate buff colour, bounded with edges and belts of the most beautiful and finely variegated hues. In the centre of each of the posterior wings, is a remarkable and elegant transparency, like a human eye. It has now no mouth or other aperture for receiving food, and has to move along in a hitherto unknown and astonishing element, flying to a great distance, it deposits its eggs on a species of tree, alone suited to the young caterpillar, and, in a few days, dies. This seems to be the highest order of caterpillars which form silk, and is called the *Phalæna Paphia*, or atlas moth, and, in its wild state, exists in different varieties over India and the south of China. “ They are found in such abundance in many parts of Bengal and the adjoining provinces, as to have afforded, from time immemorial, an abundant supply of a most durable, coarse, dark coloured silk, commonly called Tusset silk, which is worn into a kind of cloth called Tusset doothies, much worn by Brahmins and other sects of Hindoos. This substance would, no doubt, be highly useful to the inhabitants of America and the south of Europe, where a cheap, light, cool, and durable dress such as this is much wanted.*

* Dr. Roxburgh's Account of the Tusset and Arrundy silk-worms.

When domesticated, the silk-worm is quite different from what it is in its wild state. The changes which it undergoes have been remarked by many a little boy who has kept silk-worms even in England. They are worthy of the contemplation of the most cultivated mind. At first a minute egg appears, smaller than a pin's head, from which, in a few days, under a high temperature, issues a caterpillar scarcely visible, existing on the leaf only of a particular tree, which alone affords the materials for forming its future changes, and on which no other insect seems to exist. It eats for a few days voraciously, until the skin becomes too tight for the internal parts of its body, and is then stretched and widened. To enable the insect to throw off this burdensome envelope, the worm sickens, refuses to eat, and evacuates the contents of its stomach. The skin, in consequence of its former distension, now becomes very loose about it. When the worm finds this to be the case, it makes a hole in the skin near the head, gets rid of it, and comes out supplied with a fine new elastic covering, which also in a few days undergoes the fate of the former. These changes take place several times, and vary according to the species of worm. At last it reaches its climax in this form, and becomes of a bright yellow colour, showing that it is about to commence spinning

its golden coloured ball or cocoon. It throws out loose threads at first, which are intended to keep the ball steady, and gradually surrounds itself in a covering of the most beautiful material, and concealed within this ball, continues spinning from its stomach the silken threads into a strong comfortable dwelling, the inner lining of which is formed into a delicate, but strong membrane, resembling the finest writing paper, or the inner coating of an egg shell. The worm at last throws off its caterpillar skin within, and is immediately transformed into a new creature, with a smooth shelly skin, composed of circular rings. It remains in this state of chrysalis, with very little appearance of life, for eight or ten days, and then moistening the end of the ball, it comes forth a most lovely little butterfly, lays its eggs, and dies.

How much is there here to humble the pride of man, when he looks at the insignificant insect which supplies him with his gaudy silken robe, and how much also to confirm the hopes of the Christian, when he sees, in the astonishing changes of a despised caterpillar, an emblem of the glorious change he himself is destined to undergo. With the pleasing hope, that this subject may meet with due consideration, the following statements, the substance of a report, addressed to the Collector of 'Ahmudnuggur, .

in the year 1832, are here inserted, to give some idea of the success which attended an attempt to introduce the culture of silk at Ahmudnuggur in the Deccan.

“ I conceive my success in the attempt which I am now making to rear the mulberry trees, to introduce an efficient mode of feeding the silk-worm, and to improve the method of reeling the silk, to be an object of so much importance to the good of the country, that I deem it my duty to trouble the Right Honourable the Governor in Council with a report of the progress I have hitherto made.

“ My labours, since obtaining the grant of the Jurria Bhang lands in July, 1830, have, until lately, been directed to the planting of the small mulberry, which is, I believe, the *Morus Indica*, and is the same, according to the best information I have obtained, as that cultivated in Bengal. It attains a height of from six to ten feet, and when situated in a favourable soil, throws out a well sized leaf. This species was planted in close hedge rows, as is done in Bengal; and when the trees reached the height of four or five feet, every alternate row was taken up with the roots, and transplanted into other spots of ground at regular distances of twelve feet. This plan admitted of ploughing and harrowing in every direction round the trees, and this

saved much tedious and expensive labour. About 12,000 were removed in this way. It was found, however, that when the trees were placed at such distances, there was an useless expenditure of water on the vacant ground.*

“ The intermediate spaces among the trees were sown with *Cicer Aretinum* † and such other grains as do not rise high enough to injure the young trees. My reason for preferring the smaller kind of mulberry to the larger sort, the *Morus Rubra*, was founded on the expectation I entertained, that from the greater

* “ The lands were watered by an aqueduct, which had been made at great expense by the Mussulmen for the use of this garden. Indeed, the whole country near Ahmudnuggur seems to have been intersected by aqueducts, conducted from the neighbouring hills for the supply of the city, elegant gardens, and houses they formed about it. In that climate, it is necessary that the young trees be watered till they attain strength sufficient to enable them to go through the dry season until the fall of rain in June. This is generally done from wells by the cultivators. The water is drawn up by a large leathern bag and rope, passing over a circular wheel fixed at the top; a pair of bullocks being attached, draw up the water, by walking down an inclined plane sloping from the well, the water passes from the well along different channels leading to the rows of trees.”

† “ The *Cicer Aretinum*, is a lively little plant, which does not rise above a foot in height. The leaves contain a very agreeable acid, which is collected in a very simple manner. A cloth is placed over the plant during the night, and on being squeezed in the morning, it is found to have imbibed a considerable quantity of fluid, resembling a sort of vinegar. This plant produces several small pods, each containing three or four seeds, which are something like peas, and extensively used for feeding horses.

quantity of the resinous and saccharine fluids, in proportion to the fibrous matter in the leaves of the former than in those of the latter, I should obtain silk of a finer quality, and in greater abundance. After a fair trial, however, I have discovered, that however superior the smaller sort may be for such purposes, the nature of the soil on my grounds is not favourable to its growth. I have, therefore, lately directed my attention to a species, intermediate between the small and the large, which my head Chinaman says, is one of the best in the country. Within the last fifteen days, about 800 trees of this sort have been transplanted; and to give them every chance of success, they have been set in large holes previously dug for them, and filled with earth and manure. The roots, after thus acquiring nourishment and strength from the light soil, are enabled to penetrate the black and denser earth. I have also tried some with manure* without any white mould. One field of this intermediate kind has been laid out in hedge rows, and as they acquire sufficient height, are transplanted out, and in the course of two or three years, are likely to become very valuable trees. An experiment is at present being tried, by budding the different kinds of mulberry on each other, to ascertain what improvement it may make upon the leaf. One plant of *Morus*

Alba, and a variety of the *Morus Indica*, growing at St. Helena, together with the *Doppia Foglia* of the Italians, are in a flourishing state. These were obtained from Dapoorec.

“ The disadvantages under which I labour are these, —1st, The adhesive and hard nature of the soil, which consists of a great proportion of alumina, without any scilicious earth to keep it open, and its consequent great absorption and retention of water, the evaporation of which, during the hot season, causes a sudden contraction of bulk, splits the soil into fissures, and exposes the roots of the trees. 2d, The exhaustion of the land, in consequence of excessive irrigation by the cultivators who formerly tilled the grounds. 3d, The spontaneous grasses, called *Huryallee* and *Koonda*, which occasion incessant labour and expense, as their roots run under ground in every direction, to the depth of four feet or more. These often form a complete basket work round the roots of the mulberry trees, and bind them so closely, that they cannot expand. Scarcely is a piece of ground well cleaned, before it is again overrun with these creeping grasses. This almost indestructible plant is the *Agrostis Linearis*, which, however beautiful it may appear to the Botanist, is one of the most pestilent nuisances to husbandry. These

are the peculiar difficulties with which I have to contend in the rearing of trees, on which the success of my undertaking almost entirely depends. I endeavour to overcome them by every means in my power, that the natives may perceive that it is both possible and advantageous to raise silk in the Deccan. I am happy in being able to state, that some natives have begun to form plantations of mulberry trees for themselves.

“ Government allowed me to occupy the old palace for the purposes connected with the undertaking. Although this building was in a most delapidated state, I perceived, that from its coolness and spacious extent, it was admirably adapted to the purpose I had in view. Accordingly, several suits of feeding rooms, exactly on the plan recommended by Count Dandolo, were fitted at a considerable expense. Should the mulberry plantation ever be extended, there is still left ample accommodation for an immense addition to the number of worms. A bungalow has also been built on the grounds, with stabling for bullocks and other conveniences. The situation of this palace in the immediate vicinity of my sphere of duty, as Civil Surgeon at this station, enables me, with proper arrangements, to perform all the duties of my pro-

fession, and also to superintend all that is going on in the silk establishment.*

“ Having thus given you a brief account of my attempts in rearing the mulberry trees, allow me next to mention the plan that has been adopted for feeding the worms.

“ The feeding of the worms and reeling of the silk, is conducted by two Chinamen, one of whom was

* “ This place is the remains of one of those many elegant palaces which were built by the Afghan princes of the Deccan. It is said to have been very beautiful, and was appropriately called *Jurria Bhang*, or the Garden of Delight. It had many kinds of orange and cooling Eastern fruit trees, many useful and ornamental, together with the handsomest of the wild trees of the East, such as the wood apple, noble tamarind, and the palas, whose beautiful scarlet flowers burst out at the time when the tree is leafless, and spread a tint of flame all over the woods, where it exists abundantly. There were also many stately cypresses, and many odoriferous shrubs and sweet flowering plants, such as the Kewra, whose flowers are about half a foot long, and most fragrant. It is thought by some to produce the famous spikenard. In the avenue leading down to the palace, were fountains throwing up the refreshing waters. Under a clump of tamarind trees, stood a cupola, the foundation of which is only now to be seen. The palace stood in the middle of the garden, and was pleasantly situated on a small island, with trees in the centre of an artificial piece of water, called a tank. It was an extensive octangular building, each side being formed of arches to support a flat roof or terrace, from which there was a commanding view extending wide over the country. In the time of the Nizam Shahee kings, it could not be approached, but by means of a boat. Within was a spacious and lofty dome, around which were upper rooms, from which the luxurious followers of the false Prophet could give audience to the people below, and at the same time enjoy the cooling moisture from five fountains, which were on the lowest floor.”

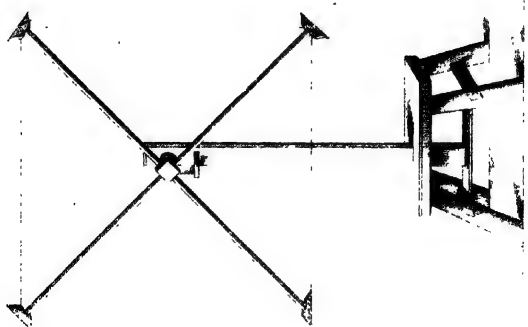
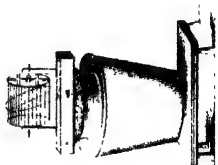
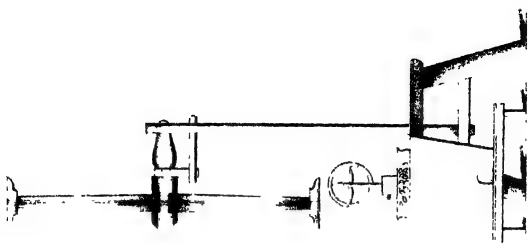
brought by a rich native merchant privately from China, for the purpose of introducing the silk cultivation into the island of Salsette, and whom he afterwards made over to me. The mode of feeding practised by them, is altogether different from that in use among the Italians. The former expend a greater quantity of leaf than the latter, at each meal given to the worms, their object being to hasten them to the period of maturity as soon as possible. The Chinese mode of cleaning and removing the worms, is much more simple than the Italian. A quantity of leaves is tightly rolled up into a hard mass, and cut with a large knife into minute pieces. This is lightly scattered over the worms, which immediately rise from the old leaf below them, to the surface of the new. The Chinaman then rolls up the worms gently in the new layer of soft leaf, leaving the dirt and old leaf with any of the sickly worms below; he then carries his roll with the worms to a nice, clean new tray, or basket, and carefully spreads it out. The sickly worms he picks out from the decayed old leaves, and gives them a separate place to feed in. Great care is taken to give the worms sufficient room as they increase in size. The Chinese frame on which the worms are placed, when they begin to assume their golden colour, and throw out silky traces,

is curious, and consists of a great number of slight loops made of bamboo cuttings, among which the worms are thickly set to form their cocoons. During this period, they expose these frames to the open air, which circulates freely among the loops, and by drying up the gummy fluid which the worms throw out copiously when they are spinning, hardens the cocoons, and renders them fit for the future operation of reeling.

“In three or four days, the worms having finished their cocoons, are destroyed, by baking them, otherwise, in about ten days, they would burst out as moths, and ruin the cocoons for reeling.

“The Chinamen brought a very simple reeling machine with them secretly from China, a representation of which forms the frontispiece to this volume.*

* “These Chinamen are very active, bold in their manner, and in every respect different from the Hindoos, to whom, from their language, dress, and long pig tails of hair hanging down their backs, they are a subject of much astonishment, and especially when they see them sit, eat, and drink like the English. They say, that when they reach China, they will be under the necessity of going ashore in the utmost privacy during the night, as their heads may be struck off for having taken away the reeling machines, and for having instructed the barbarians (the English) in Chinese science. The Rajah of Sattura, accompanied with a dependent prince, the Rajah of Akulkote, and attended by a body guard, with a large retinue of elephants, &c., visited Ahmudnuggur, for the purpose of seeing the artillery. During the visit, he came to the old palace, the former garden of delight. He appeared to take a lively interest in the silk establishment, examined the feeding apartments, went round the



“ The reeling, as conducted by the Chinese, is a very simple and interesting process. First of all, he fixes a small jar on the ground, kindles within it a charcoal fire, and sets upon it a bason of water. As soon as the water has attained a certain temperature, he throws into it the cocoons or silk balls, which have been made by the worms. While these are softening, he places upon the broad edge of the bason, his small wheel, which is made of very slight materials, such as bamboo cuttings. It is only about two and a half inches in diameter, and has a small eye in front of its stand, through which the thread of the silk is to pass as it rises out of the basin, that it may be cleaned from too much moisture and all adventitious matter. Last of all, he brings his large reeling wheel on which the skeins of silk are to be wound, and places it at the left hand side of the fire and basin. Every

mulberry plantations, and I promised to give him an account, as far as I could, in Mahrattee, of the plan pursued, and of all the operations necessary to the production of silk, and strongly pressed him to introduce such a blessing, as the culture of that article among his own subjects. He seemed particularly pleased with the Chinamen, and was told there were no castes in China. He wanted to hear them speak their native language, but the foreigners were not in humour to gratify his Highness on this point. He was very inquisitive, and asked particularly if I intended to remain among them, or to go home. On my answering that I should not go home, unless I got sick, he observed, ‘ you are a Doctor, you will not become sick.’ ‘ I replied, that there was no exemption from disease.’ ”

thing being now ready, the Chinaman sits down in front of the whole, with his two chop-sticks, putting one of these betwixt the fore and middle fingers, and the other betwixt the middle and ring fingers of his right hand, he uses them as dexterously as if they were two fingers elongated, without any danger of feeling the scalding pain of the hot water. With these chop-sticks he stirs the silk balls about, till the gum which glues their threads together, be dissolved, then he unravels a certain number of them until they run freely, makes up eight or ten of them into one common thread, and passes it through the small eye in front of the stand of the small wheel. He then conveys this thread from the eye over the top of the small wheel, brings it back again by the bottom, and twists it round the thread several times, into a kind of easily running knot, which gives the whole thread compactness and strength as it passes on to the large reeling wheel, to one of the spokes of which he now ties it. This being done, he moves gently the large wheel with his left hand, the turning of which winds up the silken thread, and causes the small wheel to revolve, and in this manner unravels the cocoons. While his left hand is thus employed, he gives with the chop-sticks in his right, a slight rotatory motion to the cocoons in the basin, producing a small vortex

in the water, round which he keeps them continually revolving. Every thing being thus begun and going smoothly on, he increases the speed of the wheels, and manifests the utmost dexterity in the use of the chop-sticks. He keeps up the vortex in the basin of water, throws out the exuvia or skins that remain after the thread is run off, preserves the threads in clear running order, prevents them breaking or entangling, and keeps up the same number. When one of the cocoons is nearly run out, he pushes another with his chop-stick into the heart of the vortex, and it is immediately drawn up into the common thread.

“ It is true the China reeling is much inferior to that of Italy. This arises not so much from the construction of the instruments, as from the carelessness of those who are generally employed in this department of the business. Had there been the same demand in India and China, for the finer material as for the coarse, raw silk, which is in common use, greater attention would have been directed to this important operation; and the manner of conducting it, would have been attended with greater care in the selection of the cocoons, in changing the water, and in keeping exactly the same number of cocoons running, to form the common thread. The Chinese instrument, indeed, has these decided advantages over the Italian.

It requires very little fuel—one person can manage the whole—it can be used in any corner of a poor woman's hut, and might easily be introduced into the houses of the various classes of Hindoos, and into those of the Mussulmans; and as the females in the families of the latter are not permitted, by the laws of their religion, to be seen in public, employment such as this simple machine would afford them in their own houses, might tend to raise this miserable population into a higher degree of comfort and moral feeling.

“The most approved English machine that could be procured in London, has been sent to me, and also that used by the Italians, but neither of them is adapted to make the reeling a domestic operation in the house of the poor, like the simple one from China.

“The quantity of pure or reeled silk from my cocoons, is about one eighth their weight a much greater proportion than that obtained in Italy or Bengal. The Honourable Andrew Ramsay stated in his examination before the committee of the House of Lords, 1830, that the maund of Bengal cocoons of 80 lbs. yielded only about 4 lbs of pure silk, or a twentieth part of the whole, but I should think there must be some mistake in this calculation, because Count Dandolo sometimes obtained one tenth in Italy, and the

average produced in the silk mills of that country, was one twelfth. In the more favourable regions of Dalmatia, rather more than the latter proportion was obtained, which the Count thinks is owing, as his experiments tend to show, to the leaf being more nutritive in warm climates. What is called the staple or strength of raw silk, is given by the rotatory motion the cocoons receive from the Chinaman's chopsticks in the basin, and also by the twist which is given to the common thread in its passage from the small to the large reel. The Italians cross their threads several times, and also give them a rotatory motion in the boiler, to effect the same purpose. By way of experiment, the small China wheel was placed over the Italian boiler, and in this way the common thread seemed to receive as strong, if not a stronger fibre than from the usual Italian plan of crossing before the thread reaches the layer of their machine.

“So desirous are the silk throwsters (those who throw or twist the raw silk, imported into the country from China, for the domestic manufacture of cloths,) of learning the method of reeling practised by the Chinamen, that they have brought their women and sons to be taught by these strangers, and have refused to receive any wages, until they were expert enough to be regularly employed. The natives offer to pur-

chase raw silk from me, at the usual market prices given for that imported from China, provided they can be supplied in this way. It will, owing to the quicker return of the capital employed, be much better, than if the silk were sent to Europe. The native merchants have an exorbitant profit on the raw silk as it passes through their hands to supply the poorer classes of throwsters, dyers, and weavers. All of these seem anxious for my success, and many of them have come to see my establishment from considerable distances. If the present undertaking prosper, it will not only be the means of affording the lower classes raw silk at a much cheaper rate than they can now procure it, but will also bring Europeans into direct connection with the manufacturing orders of the community. The interests and importance of this body of men have been hitherto too much neglected.

“The next processes which silk undergoes, namely, winding and throwsting having been in use from time immemorial among the Hindoos, it may prove interesting to give a short account of the manner in which they are conducted.

“Winding. A skein of raw silk is placed on a slight swift, made of bamboos, a woman sits down on the floor, and with her foot makes the swift turn round.

In her hand she holds a distaff which receives the silk as it is unravelled. She next places her distaff on the ground, and draws off the skein into silken bobbins. In England, silk winding is performed by the aid of the most beautiful machinery. Long extended lines of swifts revolve together, and the silk passes on from these to bobbins at once ; whereas the poor Indian takes only one skein, has the trouble of unravelling and attaching it to a distaff from which she has again to form into a bobbin.

“ Throwsting. The twisting of raw silk imported from China, is very extensively practised in some cities in the Deccan, and this operation seems to have been confined generally to particular families. The apparatus is quite rude and worthy of the primitive ages. The process tedious and complicated. From a few bobbins on revolving spindles, the thread is wound into skeins upon a long wheel, about one foot and a half in diameter, Each thread receives a twist in a particular direction, by the revolving of the spindles, and passes on to the wheel. The skeins are now ready for the use of the weaver as weft, but to form it into the warp of cloth, the skeins are put upon swifts such as those mentioned above, from these swifts it is wound upon distaffs, and again from every two of these distaffs, the thread is run off upon single

bobbins. These bobbins are carried back to the throwsting mill to undergo the same process as was gone through before, when making the weft, with this single difference, that the two threads of each are now twisted into one, in a direction opposite to that formerly given. The motion of the whole is produced by a rude upright wheel of about four feet in diameter, which the throwster turns with his left hand, while he sits watching the threads.

“ Any person acquainted with the mode of twisting silk, or who may have seen an English throwsting mill, will readily perceive what a blessing the introduction of some part of our throwsting machinery would be among the Hindoos, that by reducing the labour many hundred fold, it would tend to cheapen a clothing of which all classes are particularly fond, and would increase its consumption to a very great extent, in a climate so peculiarly adapted to silken raiments.

“ It may prove interesting to mention what information I have received from the head Chinaman, regarding the mulberry trees, silk, and the varieties of the worm in China; but I cannot vouch for its correctness, as he does not properly understand the native language, the only one through which we can communicate. In China all kinds of mulberry trees

generally grow in rows, and are cut down once every year level with the ground : white earth, sometimes taken from the bottom of a tank or pool, and manure being applied, the hedge rows spring up rapidly and continue to throw out leaves luxuriantly thriving the whole rainy season, which lasts seven months. Should the rain not fall, the trees are watered by the hand from a tank or well in the midst of a plantation. These plantations sometimes cover a large tract of country, and are kept very clean. The mulberry leaves are often brought from the distance of two days march, and sold to the feeders of the worms in the nearest market, at an average of 140 lbs. for a dollar. The worms are kept in large round baskets, at small distances, one above another, on stands, are fed six times in the day, and four times during the night. After feeding, a cloth is put round the stand, and the feeder again goes into the market to purchase fresh leaves. The reelers buy the frames I have mentioned, on which the worms are thickly placed for spinning from the feeder. They will reel about 180 grains of silk in a day, for which they are paid about 6d.; but they work only till four o'clock.

“ They have three kinds of worms in China, the largest is said to be, when fit for spinning, about three inches long, and of a black colour. Three crops of

a deep yellow coloured silk can be obtained from this species in the year. This worm which is the most expensive: four and a half frames thickly set with worms, are sold for two dollars. The worms on these four and a half frames will have consumed 180 lbs. of leaves in their progress, and will produce 2 lbs. of pure silk. The cocoon produced from this worm is about two and a half inches long, and two in circumference, and yields that strong sort of silks used in the manufacture of the Chinese broad cloths. The second class of worm producing the white silk, is extensively fed in China; it is smaller than any of the others, and completes its stages in twenty days. The third kind resembles the common worm we have in India, but the fibre of the silk is perhaps stronger. It completes its stages in twenty three days. One hundred and eighty pounds of leaves are required to feed seven frames of the white worm, and rather more for the third kind. The seven frames are bought for a dollar, and will produce about 1 lb. of pure silk. From each of the two latter kinds, six crops in the year can be obtained.

“The Chinaman, whose house is about 200 miles from Canton, brought with him one or two of the large worm’s cocoons: only one of them, however, came out, and was a most beautiful male, resembling the *Phalena Paphia*, but smaller. A description of the latter,

is given by Dr. Roxburgh, and from it the Tusset silk so much used by the Brahmins in Bengal, is made. The third kind of worm may be the same species that was introduced into Bengal in 1788, called the Madrassie worm, the cocoons of which seem degenerated, owing to carelessness and want of proper feeding.

“ The Chinaman says, that this climate is equal, if not superior to his own for rearing the silk worm.

“ I naturally feel anxious on risking all my little means on this concern, and my wish has been to benefit the country, but to conduct the plan with proper vigour, requires a much greater extent of capital than I can command. The soil too, is not so favourable as many others in the neighbourhood; but to these I cannot extend the sphere of my speculations. It is well worthy, however, the consideration of government how far I may go on, and in what way I can best attain the object I have in view, the most economical and efficient plan of introducing among the miserable inhabitants of the Deccan, the silk cultivation. Since the government is exceedingly desirous to improve the condition of the country, and to prevent its becoming gradually more and more impoverished; my undertaking will probably receive some consideration, for the successful introduction of the silk manufacture promises to

prove one of the greatest blessings to the poor natives of the Deccan, as well as to add largely to the revenue.

“I would also hope, that in time, many of the natives may be employed as throwsters, or twisters of silk, and that in this state it may be allowed to pass into England without much increased rate of duty. Every encouragement should be given them in raising a commodity for which their own climate is so peculiarly adapted.”

CHAPTER IV.

ADVANTAGES OF SOIL IN SOME PARTS OF INDIA FOR THE CULTIVATION OF COTTON.—CAUSES, &c.

DR. MARSHALL, in speaking of the black soils on which Cotton is grown in India, says,—“ No manure whatever is applied to these lands, nor do they ever receive or require any intermission of their annual labour and produce. When Cotton is the subject of culture, a little alternation of cropping is required, as it is not deemed good husbandry to have this plant for two successive seasons on the same ground, but of the other subjects usually raised on it, wheat, grain, and, above all, white jowaree, it will allow the same to be repeated annually for a century, without any other fear of failure, than the general one of adverse seasons. Other soils seem to depend for their fertility on the manure which is bestowed upon them, and may be considered as the mere bed of the vegetable, whilst the manure is its food, whereas the black cotton soil

supplies bed and food at once. It is a favourite maxim with agricultural philosophers, that if something be not continually brought on to the land, equal to what is taken off, it must gradually be ruined; and Sir H. Davy has even carried this speculation so far, as to ascribe the present sterility of Sicily to the quantity of grain taken from it by the Romans. Here is a soil from which every thing is taken away, and nothing brought on, and without any visible injury. There are other kinds of soils about villages, differing altogether, in the course of tillage, from that pursued with the black lands. The end proposed, being to keep them as loose and friable as possible."

The necessity of full manuring, is probably the chief reason why the lands composed of the light soils are divided into small townships, of from 3 to 6 or 700 acres. Whilst those villages where the black soil exists, have lands to the amount of 15,000 acres, the extremity of which is probably four or five miles from the town, and could never get a load of manure, however much they required it. It will naturally be asked, why this black soil is not brought more extensively into cultivation? If this were done, the grain would be of no more use than the sand on the sea shore. There are already too many producers of grain, and too few consumers. The country is in

many places thinly inhabited. According to Dr. Marshall, the Dherwan Collectorate, which alone is the size of seven or eight moderate English counties, and perhaps under the management of six or eight English civilians, and, perhaps, of these three or four may be inexperienced young gentlemen, the population, in regard to the area over which it is spread, does not exceed eighty-one to the square mile. "On a review of the whole," says Dr. Marshall, "I am inclined to state the population as under one half of what it ought to be." In some parts, he states it as low as forty-nine to a square mile. Here is a country in our hands, capable of supporting a dense and happy people, and which, if occupied by persons of capital and enterprise, might be rendered one vast corn field.

COTTON.—In India and the East, there are many species of the cotton tree indigenous to the soil. Mr. Sullivan, late collector of Coimbatore, says two kinds of cotton are native to that part of the country. It is reasonable to suppose, that in a country where this tree grows spontaneously, and in the greatest variety and luxuriance, that the cotton should be as good, if not better, than in many countries not so congenial to it. Sir John Malcolm, in speaking of

this article, says,—“ Deeming this a subject of much national importance, I not only gave it my attention in India, but have continued to do so in England. I visited Manchester, and have communicated with all from whom I could obtain information calculated to promote the object. The result is my conviction, that a much greater proportion of the trade in this material, than India now enjoys, may, with care and management, be obtained for that country, a result which will prove equally beneficial to it and England.” Mr. Sullivan, speaking of the Bourbon cotton, says,* “ All that is wanting to evince the extended cultivation of this species of cotton, which is superior to most of the American uplands, is the judicious application of a large capital. A steady encouragement of this staple, would be one of the greatest benefits that England could confer upon her Indian empire.”

The degeneracy of the Indian cotton is said to be owing to the slovenly and careless way in which the natives pick it from the pods on the tree, taking a part of the dry brittle pod along with it, and this, together with the sand and dirt it acquires, by care-

* It was the produce of this plant which sold in the London market, in 1830, at 8d. the pound, and which, if a sufficient quantity could have been obtained, would, in the opinion of the brokers, have realized 9d.

lessly tossing it about on the ground when separating the seed, renders it almost useless to our fine English machinery, which, it is said, to injure very much. To avoid this, in America they plant the trees in rows, at considerable distances, so that the slave in gathering it, does not brush off any of the dried leaves among the fine fibres of the cotton.

By adopting the American mode of planting and cultivating, and by using their machines for cleaning the cotton from the seed, no doubt the staple and fineness of the Indian cotton might be rendered such as to compete with the American, and be again suited to the English market. It would prove highly beneficial to both countries, to receive all our raw material from India, and to return it them again through the aid of our fine machinery, in the shape of cloths and our varied cotton manufacture. It is poverty alone that prevents the Hindoos from taking a greater quantity of British merchandise. The country is nearly exhausted of its wealth, and there is little or nothing at this moment, raised within it to counterpoise that exhaustion. The consequences are obvious. India is becoming every day less and less able to afford the revenues she formerly yielded. She is falling behind in the race of competition. Other nations are taking out of her hands various important

branches of trade. America is fast making head against her, through the fostering care of genius and enterprize. Long before that country was known to the civilized world, India supplied Europe with cotton, and other useful articles, but now, almost all her productions are superseded by that rising people. It may be demanded, however, Is India drained? Is the mine exhausted? No; by no means. She still possesses a revivifying power. Her resources are great. Richer treasures than those she yielded to Solomon still lie buried in her bosom. England has long had this Eastern gem within her grasp, but she has not yet learned how to appreciate it, nor does she yet know half its value. Oh! that she would consider and duly prize her possession, before it be plucked out of her hand. Let the children of England cultivate the resources of India—let men of capital and skill give her the benefit of their talents, and they will find that her capabilities exceed their most sanguine calculations.

Thousands and thousands of acres, black as ink, and of inexhaustable fertility, lie a perfect waste on the plains, betwixt any two villages in the Deccan, all capable of producing cotton and other products available to the wants of man. Labour is also so remarkably cheap, that in Guzerat, a man is hired,

not including his food, for the small sum of £3 per annum. In the Deccan, according to the reports of Lieutenant Colonel Sykes, it averages about £3, 12s. per annum.

SUGAR.—The sugar cane grows abundantly, and in the greatest luxuriance over India, and it is generally believed, found its way from the East, by the Mediterranean, to the Islands of Maderia, and Canary, and thence to the West Indies. Our distinguished countrymen, Sir John Malcolm, states his opinion, that this important article of commerce could be “manufactured to any amount in India, and from the low wages of labour, at a rate that would eventually enable it to compete with this produce from other countries, in the home market.” Were there any demand for this article beyond their own domestic consumption, no one can calculate the extent to which the Hindoos could supply sugar, at the cheapest rate, to all the European states through the medium of the steam communication now about to be established by the Red and Mediterranean seas. In no preparation is the want of skill and carelessness of the Hindoos more conspicuously seen, than in the one under consideration. They seem never to have had any commercial stimulus held out to them to cause them to refine or

improve their sugars. The red or black in the state of cane, as being more profitable than that of pressing the juice, is often sold in the markets, or at the gate of a town, at the rate of three or four large canes for a halfpenny, to the passengers, who chew it as they walk along. The mode of planting is very simple. The machine for squeezing out the juice, consists of two upright wooden screws, betwixt which the canes are passed—the liquid is then evaporated, after which no further trouble is taken with it. In this state it is used, and is sugar mixed up with the treacle. The consumption of it in this form is general among all classes of the natives throughout India. The machinery used by the planters in the West Indies, and their mode of refining and crystallizing sugars, is here altogether unknown. In Bengal, it is true, they have lately begun to refine it, but almost throughout India, it has been used, as described, from time immemorial. This grand eastern staple has been excluded by high duties from foreign markets, and of course its value is unknown. In M'Culloch's Dictionary, it is mentioned, "great, however, as the increase in the use of sugar has certainly been, it may, we think, be easily shown, that the demand for it is still very far below its natural limit; and that, were the existing duties on this article reduced, and the trade placed on a proper

footing, its consumption, and the revenue produced from it, would be greatly increased." The reducing the duty on the East Indian sugars would in this case only quicken the demand. In order, therefore, that the subjects of Great Britain may be benefitted by having this essential part of their food on reasonable terms, they should turn their attention to India. In that naturally rich country, England will find an ample resource from whence she will be able to stimulate the freemen of the West, to exert themselves to procure a livelihood, by a fair competition of their sugars, in every market, with those of the East. England, the greatest commercial nation in the world, might perhaps give some attention to this important subject, and deal with even handed justice to her East and West Indian colonies, and give them an equal opportunity of displaying their powers in the commercial intercourse of nations.

INDIGO has been tried on the west side of India, in Guzerat, and has been found to succeed very well. There seems to be no reason why it should not be raised to the same extent and of equal quality to that produced in Bengal.

COFFEE may be multiplied to any extent. It is said to grow on almost every situation where it has

been tried, and though it be far more productive in rich soils, its berry is of a much superior quality in poor lands, and such, certainly, is its native climate in Arabia. Through the activity of some gentlemen in Columbo, it has lately attained a high character, and is producing an ample return in that quarter.* The same gentlemen have also erected a steam engine to press oil from the cocoa nut, which is now produced to a great extent. The waxy part of this oil hardens in our temperature, and from this wax candles are made in England, so that this oil is found to be a profitable commodity, and of great use to Britain, as well as the natives of the East.

The enumeration of all the various oils that might be available to Great Britain, would form a long list. They have not the olive in India, and its introduction from the Mediterranean might easily be effected, and would be a desirable object. Admiral Sir Pultney Malcolm, who, to give confidence to the Greeks, built a handsome residence within two miles of Athens, laid out gardens with olives, and the most curious trees from various parts of the world, and with liberal hand gave them away among the natives, expressed

* The Coffee of the Malabar coast is so good, that it is shipped for Mocha, to be re-exported as genuine Arabian Coffee.

to the writer of this little work, much surprise, that the olive had never been introduced into India, and said, that it would prove a great blessing to the people. The production of the essential oils would be much increased by the introduction of a greater number of Englishmen into India, as the natives seem not to be unacquainted with the mode of making them. Cajeput or Cayu-putti Oil, might be produced in abundance, instead of depending upon the Eastern Islands belonging to Holland. Castor Oil has been made of the very best quality, but it was never prepared in a proper manner, until refined by some enterprising Englishmen, who established a superior mode of expressing and boiling the Castor Oil nut, at Bankote, with which they supplied the hospitals and Europeans. It will appear rather surprising, that previous to this, cold drawn Castor Oil should have been sent out from England, for the use of Englishmen in the East, where the oil trees are used as the most common boundary for gardens, and fields. Enough might be made in India to supply all Europe.

The extended consumption of all these oils in Europe, and England, would take place, and many others would probably be discovered which might prove of great use in the arts.

CAOUTCHOUC—Indian Rubber. This article is becoming of much importance. It might be imported for the supply of England, from India, in any quantity, as the tree grows luxuriantly; one of them in the garden of the writer, was very handsome, having large broad leaves from every part, pouring out the milky juice which forms the rubber. It is a substance which has been entirely neglected in the East.

COCHINEAL.—This elegant dye and important article of commerce, has been introduced into India by Dr. Anderson at Madras, and also tried in Ceylon, by Mr. Layard, who informed the writer that there could be no doubt of its success; that he produced a large quantity of Cochineal, and found the insect on the cactus bushes. Mr. Layard has been many years in the civil service of that Island; but the individuals who attempted it, seem to have had so many important public duties to attend, that the insect was not properly superintended by the natives. The cactus, on which it feeds, grows in the greatest abundance, and we may reasonably conclude it would succeed as well in India as South America. At present it is used extensively over that vast country, in dyeing their permanent red colours for turbans, and is imported into India at great expense. Aloes, Catechu, and

a long list of drugs might be mentioned. The valuable extract called Catechu, possesses a greater proportion of tannin, than any other astringent substance ; one pound of it is equal to seven or eight pounds of oak bark, according to Mr. Purkis. It appears to ooze out from the wood of the black babul, a species of *Mimosæ* all over the Deccan. The natives of the Concan boil the wood in earthen pots, evaporate the extract from it into cakes, for the Bombay market, whence it is exported to England, to be used in dyeing, tanning, and as an astringent medicine.

Quinine may be made from the bark of the *Meelia Azeedarachta*, known in India among the English by the name of Neem tree, the bark of which, and the leaves, are extremely bitter, and have been long employed in the form of decoctions among the natives, as fetrifuge. A most valuable medicine, said to be a specific in Thrush, is to be found in India; it is found in the hollow of the bamboo, is white, and extremely light. The Bamboo cutters say, they will sometimes open nearly 1000 without finding any.

Many resinous gums exude from trees—one from the red sanders-wood and asum trees, resembling that valuable drug called dragon's blood. These are applied to wounds by the natives. Many fragrant Bdellia might be discovered.

TEA.—Many districts are, no doubt, admirably adapted for the cultivation of this plant, and would richly repay the speculator, if proper stations were chosen for its growth.

CINNAMON grows wild in some of the woods of the S. Mahratta country, and, no doubt, could be rendered equal to that of Ceylon, and would have the same quill appearance, were it cut before the commencement of the rains, level with the ground.

IRON exists in abundance in many of the hills. It is said to have some peculiar properties, partaking of the nature of iron and steel. This seems to be owing to the manner in which the natives prepare it. The ore is pounded, mixed up with powdered charcoal, and put into a long funnel or chimney. Fire is applied from below, and kept up by blowing with hand bellows, which are very different from those employed in England, and altogether of a primitive description, formed from the whole skin of an animal: the holes where the feet were, are stopt up; a pipe is put into the place where the neck was; the skin is cut across near the hind quarter, and has a slip of stick on each side, with a loop for the hand in the upper one. The natives sit puffing away with these bellows, at a hole in the

bottom of the funnel. The melted metal falls to the bottom. The pig of iron is drawn out, and is afterwards made into agricultural implements.

There can be little doubt but that the iron ores would be much improved by our countrymen, and these, and many other valuable ores, rendered extensively useful to India and Great Britain.

Making glass is totally unknown on the western side of India, and together with crockery ware, and all the comforts required by the English in India, has been imported at great expense.

The light English carts and iron plough would prove of great use to the Hindoos. The plough used in India is made of a sharp pointed block of hard babul wood, or, as it is sometimes called, Egyptian thorn. It has a pole in front at the extremity of which there is a cross beam to be laid over the necks of the bullocks. From behind the block a single handle rises up. Nothing can discover greater want of mechanical skill than this plough. It merely stirs the soil to the depth of three or four inches.

An English thrashing machine would prove also a great benefit to India. At the harvest season the crops are carefully watched by men and boys around the fields: they crack whips, and throw stones to keep off the flocks of birds. When the crop is fully ripe,

it is plucked up by the roots. A large semicircular heap is made of it on the highest piece of ground, where the thrashing floor is formed. Women sit twisting off the heads of the grain, and throwing it on the floor. When a sufficient number of ears have been laid on the floor, the bullocks are tied in a row to a post in the centre, their noses muzzled, and are driven round and round treading out the grain. The winnowing is performed by a man standing on a high stool, and letting the grain fall gently, while the chaff is carried away before the wind.

Such a person as a miller is unknown among the Hindoos: the meal is all ground by each family between two stones. The introduction of a few wind or water mills would prove the greatest blessing to the inhabitants of India, and very profitable to any one erecting them. On the other hand, the English might derive much from these that might be useful to her subjects at home. Some of their valuable grains might become assimilated, as the potatoe has been, to the climate of England. These might prove a very nutritious food for many of our poor people, because, in proportion to the extent of ground occupied by them, they are more capable of nourishing a dense population, than the present grains. A head of what is called Bajecree (*Holcus Spicatus*,) or of Jowaree

(*Holcus Sorghum*,) contains commonly 400 or 500 grains, and in a remarkably fine one, 2000 have been counted. Their sweet potatoes which are long and more like roots than potatoes, might also be improved by English culture, and rendered available.

Their simple drill machine might also prove worthy the notice of an Englishman. It appears rude, but is well suited from its great simplicity for sowing their grains in rows. It consists of three or four small hollow bamboos which are about four feet high, and fixed into a large wooden bowl or cup. Near the ground each passes through a bar of wood, at the distance of about a foot one from the other. After passing through this, they run obliquely forward, and are shod with iron at the point, behind which the grain drops into the ground. The machine is drawn forward by a pair of bullocks, which pull from a beam running forward from the bar. The man goes behind driving the bullocks, and feeding the cup from a bag tied round his waist. A large iron scraper fixed in a bar or beam of wood, is often used instead of ploughing by the Hindoos. It penetrates the ground to the depth of three inches, and destroys all the weeds, to remove which, a harrow with three or four wooden teeth follows. They clean the ground by means of a crescent shaped beam. When the blade is low, this

allows the row or line of the grain to escape in the middle, while a small iron scraper on each end of the beam clears the interval betwixt the rows of all weeds, loosening the soil, and throwing it gently up against the roots of the growing wheat. Their plan of sowing other products along with their grains, might be worthy of consideration. One of these is called Kurdee, it resembles a thistle with prickles, and has a bright yellow flower with a number of seeds, which yield an abundant supply of oil, used by the poor natives, in all their houses to burn. The other kind is cultivated chiefly for the colouring matter. In its flower it yields a beautiful crimson dye, with which the natives dye their turbans; but it is rather of an evenescent nature, and requires to be renewed every two or three months—this is known in the English market under the name of Safflower, (*Cacthamus Imitorius*) these are put into the ground together with their other large grains, with which they do not interfere. They ripen a short time after them, when they are plucked up, tied in bundles, and the seed beaten out. The refuse is generally burned.

The mode in which the natives of India tan leather, might also deserve the notice of an Englishman. In this country nearly twelve months are required to tan sole leather, and about six for the upper leather of

shoes. In India three or four days do not intervene between the killing of the animals and the wearing of the shoes made from the hides. This despatch may be owing to the very great astringent powers of the Indian barks with which the tanners in England are unacquainted, and to the use of hot water, which extracts more of the power of the bark. In England they have lately begun to heat the tanning solutions, that the water may receive and impart the astringent principle quicker, and the results have been highly favourable. The various oils which India produces, would perhaps answer well for rubbing into the upper leathers, to render them soft and pliable, instead of the tallow and cod now used in England.

The writer of this work could have made a longer list of the productions of India, which would shew the mutual advantages which would arise to both countries from the more extensive employment of our countrymen in India; but being without any of his own memoranda on Indian subjects to which he might refer, he has been constrained to draw almost entirely on his memory for materials. He trusts, however, that the few suggestions which he has been enabled to offer, will be sufficient to evince the importance of our Indian possessions, to induce some of our enter-

prising countrymen to form new settlements in that highly interesting region. By the cultivation of the various products of the East, and by the introduction of British arts, and British commerce, such settlers may confidently hope, under the divine blessing, to reap a rich and abundant harvest.

CHAPTER V.

HOWEVER sanguine we may be in our expectations of benefit to be conferred on the natives of India, by the introduction of British capital among them, and however promising we may think the field for the profitable employment of such capital, we cannot but express our decided conviction, that much will still be wanting for the promotion even of that mercantile object. The lower castes will form the great body out of which the mechanics and agriculturists to be employed by the Europeans in their various establishments, must necessarily be chosen. These classes are, as we have had frequent occasion to remark, in a state of great intellectual and moral darkness. To remove this, the two immediate instruments to be employed are schools and missions. The influence exerted on the minds of the natives by the present system of education, which almost universally prevails, is now to be noticed.

This system is pernicious in two ways, both in leaving the intellectual powers undisciplined, and by imbuing the heart with notions on religious subjects, which tend to mislead and corrupt it. In the village schools, reading, writing, and a slight acquaintance with accounts, constitute the extent of knowledge attained by the boys. Beyond these, the masters themselves are not qualified to give instruction. The books which are given them to read, consist of portions translated from the Sanscrit, such as the Ram Heigia, or the adventures of their God Ram against Ceylon, which they sometimes peruse. These writings, instead of elevating the mind, by presenting proper ideas of the Supreme Being, fill the imagination of the young with impure conceptions, and lay the foundation for much of that immorality by which these unhappy creatures are distinguished, after they have attained to manhood. The very low state of education among the Hindoos, may be known from the result of some inquiries which the writer of these lines made at the request of Sir John Malcolm, into the nature and extent of native education in the large district of Ahmudnuggur, which, in 1829, contained 105 villages. Some of these were considerable towns, with a population of several thousands. In the whole

there were only 2,906 boys attending schools.* The number of masters was 164, and the whole amount of their income, paid partly in kind, by each pupil bringing two handfuls of grain every morning, and partly in cash, was 573 Rupees, or about £60 English money. It was thought interesting to ascertain what effect the British sway might have had in advancing the lower orders to the blessings of education, and in breaking that chain of castes which has hitherto excluded them from improving their mental powers. The proportion of the different castes of school boys throughout the district, could not be known on account of many of the villages having omitted to notice this in their returns. It was however ascertained in the city of Ahmudnuggur, which contains about 16,000 inhabitants, where there were 209 boys attending the native schools, and of these one half only were Brahmins, the rest were composed of the agricultural and other classes, excepting the very lowest grade, such as the caste of leather workers, which cannot be admitted into any school lest they defile the others. These acquire sometimes a little reading and writing from the Priests of their own order, but this is rare. The number of children of lower castes at schools, it is generally acknowledged,

* This calculation does not include the Education Society's Schools in the district, consisting of about 234 boys.

has of late years been gradually increasing. This circumstance seems to be owing to the Government admitting them to many situations from which they were formerly excluded; for all natives show an exclusive concern for their secular interests, without any reference to the enlargement of the mind. The agricultural classes of India, it must be acknowledged, do not possess that degree of intelligence and capital which it is desirable an agricultural community should have, and are all obliged to labour for a bare support, derived from the cheapest kind of food, furnished from the edible grains, of which a sufficient quantity for a working man may be procured for about twopence daily. The power which mental improvement gives to the Brahmins and higher grades, has always been, and is employed to the spoliation and depression of the cultivators. It would be of much consequence to the latter, having more extended intercourse with Europeans, by which they would be raised to a greater degree of intellectual improvement, which would prevent them becoming a prey to others, and elevate them above their present wretched poverty.

It cannot be expected that England could easily instruct her many millions of Eastern subjects, and, of course, her endeavours to procure such a blessing must be very limited, without the desire for knowledge in the

people themselves. That this desire is still at a very low ebb, may be easily known from the irregular attendance of the boys at school ; from the anxious wish they have to enter into offices, where they will remain for many years without pay, in the hope of obtaining a situation by subservience to the will of those in authority ; and also from the fact of females never being educated in India, but thought unworthy of rational improvement.

The manner in which the boys are educated is very simple. The figures or letters are first drawn on a sand board, and the child follows them all day with a pencil, repeating their sounds: by this means they acquire reading and writing simultaneously. At the evening's lesson the boys all stand up, and one of them by turns sings out the letters, or figures, and all the others join in the song. In some villages the pay of the masters amounts to only four or five shillings monthly, and it is surprising how they can manage to live upon such a scanty pittance ; but the necessary consequence is, that the situation is often occupied by men of the lowest attainments.

On this important subject the writer may be allowed to remark, that the means at present made use of among the natives at school, in the domestic circle, and in their associations with each other, are not, as

far as he can judge, at all adequate for the important purpose of improving the mind. On the contrary, they tend to debase and corrupt it. Yet there can be little doubt but that the benevolent exertions of our countrymen might find an ample field for benefitting this benighted portion of their fellow subjects, by making improvements in the village schools, in which the boys might have a far different train of virtuous and intellectual ideas imparted to them, by which the influence of a vicious and ignorant society would be greatly reduced.

In the Concan and Calcutta, there is a plain illustration of the good which may accrue to the cause of education, by the more extensive operation of European exertions. On the first establishment of schools, under the Scottish mission, in the former place, the missionaries were looked upon by the natives as agents of the Government. The arranging the boys at the schools in classes, seemed to have so much of an English military camp appearance about it, that, at first, it was reported the boys would be carried off for Sepoys.

The English officers seemed also hostile to the work, and argued that the introduction of Christian schools would tend to prejudice the natives against all mental improvement, and would counteract the exer-

tions of the Society formed for promoting general education. Both these difficulties were easily overcome. The natives soon found out that their fears were ill founded, and experience showed that the mission schools were better attended than those of the education Society. The missionaries had no difficulty in sweeping from the schools all their native legends, and introducing the Scriptures and other Christian books. At one time the Scottish mission had 70 schools containing about three thousand scholars; and it was only the want of funds and superintendence that prevented their being carried to any extent, as they had applications from all quarters for new ones. All this was effected by European superintendence, and could never have been accomplished by the natives themselves.

The Assembly's school in Calcutta contains, by the last accounts, five hundred and fifty pupils, and might be increased to any extent. Nearly one hundred are in the daily and careful study of the Scriptures, and all the rest are in training for the same privilege. At the last annual examination the pupils were divided into fifteen classes. The highest had read the four gospels, the Acts, several of the Epistles, and portions of the Old Testament. They had a minute acquaintance with the evidences, and knew as much of the

doctrines systematically as is to be found in the first six of Scott's Essays. In mathematics they had thoroughly mastered the six books of Euclid, Land-surveying, and Logarithms, and Algebra as far as Quadratic Equations. In history they had read from the creation to the birth of Christ, and were examined, *ad aperturam libri*. They had made similar progress in Geography, Physical and Political, and the use of the Globes.

It appears strange that some eminent men should hold an opinion that missionaries are a dangerous class of people in the East, and that their labours tend to alienate the minds of the natives from the British Government. Many still suppose that if we interfere with the religion and prejudices of the Hindoos, they will immediately take the alarm and endeavour to overthrow our Government; but this is a gross mistake. It is by the secret and unostentatious way in which Christianity is introduced by our missionaries, that the force of truth touches the heart of the natives, subdues their errors, dispels their degrading superstitions, and fills them with love and veneration for the British name. Instead of being afraid of adding to the number of missionaries, we should all lament that there are so few of them in India. The labours of a Swartz and a Martyn have left a fragrance behind

them sweeter than all the odours of Arabia. If a competent number of such labourers were sent into this extensive vineyard, no powers of man can calculate the good which might be effected. As yet a very small portion of this moral wilderness has been brought under cultivation. The extent of missionary operations and success are supposed to be much greater than they really are. This may arise from individuals reading missionary reports, and thinking the labours of a few are great and encouraging; but let us consider the immense extent of the field, said to consist of nearly *140 millions of people, and its fearful appearance, that the two missionaries who labour in the rich provinces of Guzeratte, alone have a population of about five millions, among whom, to spend their strength. In the chief city where they reside, Surat, are one hundred and fifty thousand inhabitants, and then let us look to the small band of missionaries scattered over the different nations, under British dominion; and we cannot but mourn, that the exertions of Christians in England with all their obligations to assist India, have been so feeble and contracted. Never were there men better adapted for this noble enterprize, than the English, Scotch, and

* Historical and Descriptive account of India.

American missionaries ; several of whom the writer of these pages has known in Guzeratte, and the Deccan. Most of them are so thoroughly conversant with the native languages, notwithstanding those languages are so difficult to acquire in their different sounds, that a misplaced hard or soft *r* or *d* will completely alter the meaning of a word. Some of them are perfectly acquainted with all the assailable points of the Hindoo religion, and have such a correct knowledge of their mythology, that they are well able to contend with the cunning Brahmins, and fully to confute them in those open discussions which they maintain in the presence of the common people. The writer of these lines, has heard it remarked by the natives with respect to a certain missionary, that if he were in another room and to be overheard speaking, his voice, manner, and language could not be known from that of one of their most learned men. With what feelings of respect do many of the lower classes talk of them, whilst they wonder at their acquaintance with their sacred books, with what surprise do they hear them expose their inconsistencies, and with what confidence and freeness do they address these meek and lowly men. Of the missionaries here alluded to, it is not too much to say that they unite harmlessness with sagacity, and simplicity with purity. They are

devoid of all selfishness, and never interfere in political concerns ; their only arguments are the words of wisdom and truth, and their only armour the panoply of faith and hope. Christianity will prove one of the strongest bonds of union between India and Great Britain, whilst the blessings which it imparts will subdue superstition, and tend to prevent the increasing poverty of the country, they will effectually counteract that complication of evils which at present prevails amongst the natives of India, and of the extent of which Britons do not seem sufficiently aware. Without conferring such benefits on our Eastern subjects, we shall gradually lose all hold on their affections, and be regarded by them with cold indifference or with feelings of hostility. It is by the mighty engine of superstition that the crafty Brahmins hope to excite all classes against us, and destroy our power; let some pretended incarnation of the Deity appear among them, when once we have completely alienated them from us, let him prove successful in a few conflicts, and our empire in the East, vast as it is, will totter and fall to the ground.

The paramount reign of superstition under the Brahminical government, and its general prevalence under the British dominion, has been, and still continues to be, one principal cause of the impoverished

and degraded condition of the natives. On a superficial view, the consideration of the idolatry of India may appear foreign to a work of this kind, but as, in its extensive operation, it is not only one of the greatest obstacles to the improvement of India, but even seems to have induced that state of anarchy and confusion which frequently prevailed there, and is evidently the direst calamity which can afflict a country; in however different a light it may be regarded by many, the subject demands peculiar investigation. Who can behold the magnificent Hindoo temples with their splendid abominations, or hear of the munificent endowments of the kings for their support, and yet deny the extent of superstition among this benighted people? Who can witness thousands and thousands of miserable creatures from all parts of the empire, assembled at the festival of one of their celebrated gods, after having travelled over immense tracts of land, and endured the severest privations, in order to make an offering for their sins at the shrine, and to mingle in the most appalling rites and ceremonies, and to commit the most revolting crimes. Who can learn that the destroying cholera often suddenly appears among the congregated mass, and carries off multitudes, while others convey the disease in all directions, depopulating the villages as

they pass onward to their homes; and who can contemplate such spectacles, and not own that superstition was, and still is a fertile source of the miseries of the people? The very nature of the Hindoo religion seems to generate the evils which they suffer. They acknowledge an external spirit existing alone in a quiescent state before the creation of the world. To account for the formation of the universe, and the origin of evil, they represent this spirit to have assumed active forms at the creation, and to have committed abominable crimes under each of the three great characters of Creator, Preserver, and Destroyer. They never regard themselves as responsible moral agents, but suppose that they and all creatures are a part of the supreme spirit. They reserve to themselves the merit of all their good actions, which they expect will hereafter raise them higher in the scale of being, but all their bad deeds they attribute to divine agency. It is scarcely possible to conceive a system more congenial to the human mind in its fallen state. In the Gíta which is almost universally read on the western side of India, Krushna, who is said to be an incarnation of the Deity, repeatedly tells "Aurjura to throw every deed on him, and repeatedly assures him, that it is only fools who think they perform their own actions, and that one who has ceased to regard

himself as a distinct agent, may murder a whole world, and yet be an innocent murderer.”* The writer of these lines, on passing one morning through the square of a jail, where only Brahmins and high-caste-men were confined, saw a very high Brahmin sitting outside his cell, cleaning his brass pots. The sacred string was across his shoulder. A cloth around his loins formed his only clothing: his head was long shaped, the forehead projecting. He had been the teacher of a small sect, one of whom, a handsome youth, he cruelly murdered before the people, inflicting the most frightful sabre wounds on his body. On asking the Brahmin why he had done thus, raising his piercing eyes from below his dark forehead, he replied in a tone of great anger,—“ Who are you to ask such a question? Know, that it was God who did it, not I.” Incarnations of the Deity are supposed under every possible variety of form, and sometimes for great purposes; as, the Preserver, in the shape of a fish, saved Munn when all the rest of the world sank in the water. They suppose the Divinity to pervade all things, and worship him in men, beasts, reptiles, rivers, and stones. They seem to have no idea of a hell, and fear no worse fate than that of merely sink-

ing lower in the scale of animal creation, nor of a heaven, and anticipate no higher happiness than that of approaching to the immediate essence of the Deity, by privations, fastings, and washings, pilgrimages and holy contemplations. Sometimes the young disciples push an old Brahmin over a bridge, or leave him to perish outside of their house, that he may be the sooner absorbed into the divine essence. Sometimes they drown themselves in sacred rivers to attain this bliss. With the same view, the widow ascends the funeral pile with the dead body of her husband, the mother destroys the infant of her bosom, and many suffer themselves to be crushed to death under the great carriage of an idol. Sometimes the devotee may be seen sitting in profound and devout contemplation, under the shadow of the sacred tree, meditating perhaps upon Brahma Dera's (or the Creator's) great toe. Imagining himself an emanation of the Deity, and expecting soon to be absorbed into this essence ; he is indifferent to the things of this life, devoid of clothes, and covered with ashes, showing his deep humility. He is regarded as an incarnation of the Deity by the superstitious multitudes who imagine him to live without mortal food. No Hindoo sovereign omitted to bestow a village on some eminent pretender to humility and sanctity. In some places the revenues

of large villages were given to keep up great and expensive establishments, including a priesthood for the service of some famous idol, in order to procure blessings on the country. These are still continued by the English Government. When rain does not fall for a long time after the usual period, Brahmins are paid by government to pray for it at some celebrated temple; or, perhaps, some devout character will volunteer to sit up to his middle in a river, until the Deity, in pity to the sufferings of the holy man, would send down the desired blessing. In such a society, numerous are the plans adopted for gaining an influence over the human mind. Some will swing round a pole, at certain festivals, with a large hook through their flesh, pretending that they were supernaturally supported, or that they are insensible to human suffering. Some, to prove that they are more than men, will take up snakes and venomous insects in their hands, and are consequently supposed to be incarnations of the Deity. Others are publicly acknowledged as such, and have divine honours paid them—the people prostrating themselves at their feet in the streets, as they approach, and worshipping them. “All the customary sacrifices,” says Dr. Marshall, statistical reporter to the Bombay Government, “at the different periods of ploughing, seed time, and

harvesting, and at all the fixed Hindoo feasts, are performed by the Gorao, or Priest, and at particular times it is necessary that he should be inspired ; if he were not, strong doubts would be entertained of his worthiness for the sacred function. The inspiration is effected by his twisting himself about, and shaking his head violently, until extreme giddiness comes on, under which, assisted by his natural enthusiasm, he falls down in a state between frenzy and stupor, the confused images generated in which constitute the supernatural vision, and on his recovery, he embodies them as well as he can. The self delusion in this case, appears to me to be quite real. I saw a fine young man go through the process three times before he effected any thing; and on the two first failures, at which he and the spectators seemed equally disappointed, he said with much naivete, that he could not get the god to come ; on the third trial, he wrought himself into strong convulsions, and was obliged to be carried home.”*

When any thing impure, such as the touch of an Englishman, has rendered the idol unholy, the spirit is said to leave it. The Brahmin has then to go through certain incantations, before the spirit will re-

* Dr. Marshall's Report, page 83.

turn, and the villagers be able to pay their devotions to the god. Under the sacred tree, and near the gate of a village, may be often seen the disgraceful symbol of the worship of Madew, or, perhaps, the little temple containing the image of the monkey, smeared over with oil and red lead. Around this sacred temple, the superstitious old Hindoo woman performs those daily circumambulations, which are either to procure for her a favour from the god, or to make atonement for the sins of her youth. If she thinks she has already acquired a sufficient degree of merit, she hopes the suffering of these privations and circumambulations will raise her still higher among the superior order of beings after death. Another woman may perhaps be seen, who has approached the god from a great distance, by prostrations along the ground, having an only son at the point of death, and hoping the god will condescend to notice her deep humility, and restore her child. The guardian Brahmin makes known all requests, and performs the worship to the idol. He washes and paints it every morning, puts a garland of flowers round its neck, supplies the lamp with oil, and presents the offerings of the different people who come to worship at the temple. He has a yearly allowance from the village, reveals the pleasure of the god on important occasions, and communicates a

blessing to the worshippers, or inflicts punishment upon them.

Domestic and social intercourse, and recreations have, in all countries, a great influence on the heart, and a direct tendency either to destroy or corrupt the moral beauty of the mind. The Hindoo ploughman during the labours of the day, sings the impure songs of his god Krashna, and at night listens with pleasure to some one in the family circle, reading the legends which describe the freaks of the object of his worship, in the character of Gopaul, a shepherd, granting to all a free license to sin. Among the more wealthy class, the itinerant minstrel entertains a select party of friends in the court yard of a Brahmin, and sings for nights together the wonderful adventures of their god Ram, who, with an army of monkeys, rescued his wife from the strong holds of the giant Rewan, in the Island of Ceylon. At the annual festival of the Polah, when the bullocks are worshipped and paraded through the streets, attired with garlands and dresses, the chief man of the village takes the precedence of all the others, and quarrels even unto blood with all those who dispute his high claim. A whole village, men, women, and children, go sometimes out to worship the serpent, offering it rice, milk, &c., when, for nights, the females sing their songs, in circles, in its praise.

All their more innocent public festivals have a demoralizing tendency on the great congregated mass. They allow, with all other nations, that names are given only to seven days, and that mankind must have had this limitation in the beginning, from the same source from which they derived their being. They do not, however, observe any Sabbath as a day of rest to their wearied cattle, or of relief to themselves from worldly cares and anxieties. Man, however, does not seem capable of existing without a day of rest at proper intervals. There is no nation without some established festivals. The want of a pleasant interval between the Hindoo holidays, is foolishly attempted to be remedied by the great number of days during which each of them continues, but this leaves a satiety and indolence on the native mind, and constrains it to return to its usual employment with reluctance and disgust. From the want of such a merciful and glorious appointment as one day in seven of holy rest, devoted to the advancement of the noblest powers and affections of our nature, the Hindoo festivals are hailed by them with peculiar delight. They come with a double zest, on account of that constant confinement to business, to which, at all other times, they are obliged to submit. When their festivals occur, they are attended by a

great concourse of people from all quarters. The villagers are amused with the shows, parade, and licentious sports which accompany them. Their feelings on such occasions appear to be in unison with those of the rabble who attend fairs or horse races in England. The observance of Sunday by a larger number of Englishmen among them, could not fail of having a salutary effect in correcting these evils. At one time they imagined that the people who wear hats, as they often term the English, had no God at all, but happily they now begin to find this is not the case, and they esteem us the more on that account. Amusement leads the Hindoo to enter into, and enjoy the Mussulmen holidays nearly as much as their own. While, on the other hand, the Mussulmen have in this respect become, in the Deccan, half Hindoos. Fear leads the Hindoo, when suffering any ailment, to make an offering at the shrine of a Mussulman's, or an Englishman's tomb. At Scroor, in the Deccan, the tomb of Colonel Wallace has been converted into a miracle working shrine; and to mark its character, has always an English lantern hung up by its attendant. The proneness of many countries to deify their great men, and of individuals to supplicate the aid and protection of their departed friends, is an extraordinary feature in the human character, and is equally striking

among all nations of the East, whether Hindoos, Mussulmen, or Chinese, as well as among those countries nearer our own shores.

The bad effect of superstition among the Hindoos, was and still is conspicuous in giving rise to great numbers of lazy beggars. These are a great pest to the industrious portion of the community. Under the Peshwa's Government, there were no bounds to their exactions. Bands of sturdy young fellows under the sacred character of holy mendicants, sometimes arrive at an unfortunate village. Their hair long and shaggy hanging around their heads and necks, their bodies almost devoid of clothes, and covered with ashes, show their holy distinction as well as their deep humility—a stick and dried gourd in their hand, for drawing water from the wells, forming all their apparent wealth, exhibiting, perhaps, the marks of the sacred stamp of some great god, from whose shrine they had just come, and whose name they continually vociferate. They demand a certain sum as having devoted themselves entirely to the service of a god, and the superstitious villagers are afraid to refuse these exactions. To add to the troubles of the people, there was under the Peshwa's Government a highly dignified personage, who still exists under the British, but with much more limited powers: he is regarded as possessing

great authority of a temporal and spiritual nature remitting sins, and collecting sums of money from the persons to whom he grants these remissions. He has power to decide upon all questions where a Jury had thrown out any person from his caste. This is regarded as a grievous evil, since the man who is thus disgraced can have no social intercourse with his brotherhood, and cannot even eat bread from the same plate with his own family, until he is purified and restored, which can sometimes be effected only by large and expensive dinners to the whole caste, and in certain cases is said almost to be impossible. This kind of travelling Pope is called Suncrucharee, and the power of such a character among such a people, and supported by such a Government, may be easily imagined. He occasionally passed through the districts, bearing his high commission from some famous temple, and carried terror and dismay into all the villages as he passed, receiving large sums of money for the forgiveness of sins, and for throwing out or reinstating any person in his caste, accompanied with all the pomp attached to his elevated situation. The writer of these pages saw him reclining on an elegant couch, borne along on men's shoulders; on each side servants fanning him with handsome peacock's tails, while others ran before with large silver sticks to clear

the way and proclaim his greatness. On alighting from his couch his yellow-coloured clothes, and wooden sandals showed his pretensions to extreme holiness, nothing so defiling as leather could approach him, and the very ground seemed unworthy of so much purity.

The extraordinary extent of superstition is to be seen in all the actions of the Hindoos. No Hindoo enters upon the most common business of life without making an acknowledgment to a god: the ploughman has in his field or at his well some protecting evil spirit which he calls "the terrible," of whom he makes a representation in any common round stone lying near him, covers it over with red paint, and salutes it always before beginning his daily labour. No school boy commences his lesson without some acknowledgment to the god of learning. No band of plunderers enters upon their enormities without first binding themselves together by an oath at a temple, and seeking the protection of their god, by promising to lay an ample offering on his shrine, provided he will crown their enterprize with success. In the firm belief of a supposed divine assistance, they committed those fearful ravages on the villages which have been mentioned, as having so extensively prevailed under the native Governments. But to see superstition as it now

exists in its most debasing form, we must look to the sacrifices offered to the blood-thirsty wife of the destroyer, Devi ; or, as she is called on the Bengal side, Kali. A buffalo is yearly led round the village and slain at the entrance of the gate. Its blood is supposed to protect those who touch it from all evil for that year. In honour of this goddess, the villagers leave their occupations and homes to attend triennial and other periodical sacrifices, at distant temples, where buffaloes, thousands of sheep, and every fowl that can be procured are slaughtered, their blood mixed with rice, and scattered over all the fields belonging to the town where the temple is situated. The lower castes, after feasting for eight days on the bodies of the animals thus offered in sacrifice, carry off the remains to their villages, and bury them in the fields, under the impression that they have thus procured a respite from all calamity, and satisfied the goddess for a number of years. But, above all, human sacrifices are deemed most acceptable to her ; and it is impossible to tell how many have fallen and do still fall victims in private, to this most horrid superstition. A remarkable instance of this kind deserves to be recorded. A Hindoo Fakir, dressed in a fantastical garb, worked upon the mind of a wealthy high caste Brahmin woman, to the extent of making her believe that he was her

spiritual guide, charged with a message from the goddess, demanding a human sacrifice. She declared herself ready to obey the divine order, and asked who was the victim. The Fakir pointed to her own son, a young man about twenty-five years old, the heir to the family property. The deluded mother waited till the unconscious youth was asleep, and in the silence of the night she struck him on the head with an axe, and killed him. This done, she cut up the body, under the direction of her spiritual guide, the Fakir,—presented a part boiled with rice as a peace offering, with the usual ceremonies, to an image of the goddess, part to the wretch who personified the spiritual messenger; the rest she buried with so little care, that the place of its deposit was discovered by the vultures hovering over the ground, and thus brought to the notice of the English Commissioner by the Police.

BENGAL HURKARA, 9th March.

A Hindoo had been accustomed to make an annual sacrifice of a living goat to the goddess. This year having determined to make an extraordinary sacrifice, he sent for a Mahomedan barber to shave the goat. After this was finished, he desired the barber to hold the legs of the goat while the act of decapitation was

performed. The usual ceremonies commenced, the goddess was invoked, flowers and incense scattered, and the barber stooped down to the ground and firmly held the head of the victim; the Hindoo prepared for the sacrifice with an enormous knife, but instead of striking the goat, he struck off the head of the barber with one blow; the head rolled on the floor, which was soon bathed in blood. The fanatic deliberately lifted up the head by the hair, and, carrying it to the altar, performed the accustomed worship, as if it were a matter of indifference whether the sacrifice was completed with a human head or that of an animal.—*Calcutta Inquirer, March 9th, 1832.*

The person who committed this atrocious deed was tried and condemned by the British authorities. If a greater number of our countrymen were settled in India, their character and influence among the natives would materially tend to lessen these atrocities; and when they were known to occur, would most likely bring the offenders to justice.

In honour of this ferocious goddess, the Hindoos have named small-pox, *Devi*, which, from its frequent ravages, has long been considered one of her fiercest visitations. In this last respect, however, they now

find it must give place to a new calamity, Cholera, which, when it appeared, struck them with horror and consternation; its awful progress each family sought in vain to arrest, by the most ample sacrifice to this direful enemy of the Hindoo race. All human propitiation or skill were completely baffled before this new and fearful affliction, which continued for a period destroying thousands in all directions. In all such cases, any common heap of stones is made to represent the goddess, and daubed over with a little red paint, flowers are scattered around, incense is offered, accompanied with music, and numerous victims bleed as an atonement to procure peace.

Christianity has delivered England from similar superstitions, and it is to be hoped, will, through the instrumentality of Englishmen, also deliver India from the same dreadful evil.

When we look at the Deity through the terrors of the whirlwind, the awfulness of the storm, the fearful ravages of disease, or the mists of that disturbed conscience which we all naturally possess—then it is, that in civilized countries, good deeds are called in to relieve the mind of its distress, to flatter the natural pride of man, and propitiate the unseen power that surrounds us. In other countries, superstition with her fearful and various rites and sacrifices, seizes upon

the mind, and leads to the commission of the most disgusting and horrid crimes. It is only when the Deity is seen, as exhibited in the merciful Christian dispensation, that all our terrors vanish. It is in that alone that we behold our omnipotent creator as possessed of infinite holiness and love. It is in the everlasting gospel alone that mercy and truth meet together, and fill the soul with all joy and peace in believing.

At all the festivals, the chief Brahmins and Parvoes employed under Government, endeavour to procure the presence of the principal English functionaries of the place, to give them an influence over the lower natives, by showing that the English countenance their superstitions ; and it is customary to gratify them by paying respect to their ceremonies. "To grant toleration to all classes of the Hindoos is proper and laudable, but it would surely be better to stand entirely on neutral ground, and not to mix up ourselves with any of their debasing superstitions.

Superstition will appear, on accurate investigation, to have been one great cause of that confusion which often existed under the native Governments. It led plunderers to rob and ravage the villages, and excited their rulers to engage in those unsuccessful struggles in the Deccan, which ended in their own complete

overthrow, and the triumph of their conquerors. This great evil is still in operation to an amazing extent, and must be counteracted by establishing a greater proportion of our countrymen in India. The writer of this was in the habit of reading a portion of the New Testament, which has been most admirably translated into the Marathee language by the American and Scottish missionaries, with his servants and people around him every Sunday. They uniformly listened with the greatest attention, and though few of them made an open profession of Christianity, they all acknowledged the truth and beauty of the moral lessons of Scripture, and he trusts these were not unattended with salutary influences on their minds. It is indeed, humanly speaking, not wonderful that so few of them make an open acknowledgment of their belief in Christ. But we fondly hope that one great obstacle, which now lies in the way, would be removed by the settlement of a greater number of Europeans in India. At present there is no Christian society into which the native converts can be received, and, I am sorry to say, that generally both the European and native community look upon them with the greatest suspicion.

By the extensive employment of Englishmen in India, by their skill in the arts and sciences, by their

presence and influence, and by the neutral ground which, it is hoped, they will assume among all castes of natives, prejudices would be overcome, the knavery and oppression of the Brahmins be prevented, the minds of the lower classes would be cultivated and enlightened, and their attachment to the English Government excited and secured.

